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ABSTRACT

This is the first report on a nationally representative sample of the 32.9 million civilian young people who were ages 14-21 on January 1, 1979. This first survey shows that young Americans are very much interested in work; more than half of these young persons were either working or looking for work. Many young persons carry both school and work responsibilities. Race and sex discrimination in the labor market continued to cause problems for youth. Minorities had equal aspirations for education, were more willing to work, and were seeking employment as conscientiously as white youth. The difference appeared to be that employers discounted their contribution as employees because of their race or ethnic background. Many young persons drop out of school and begin immediately to have employment problems. About 2.6 million young men and women had participated in government training programs between the first day of 1978 and their interview date in 1979. In this report further details are provided about the employment and unemployment status of these young persons, their reactions to school, their assessment of Federal Government training programs, their vocational training, their attitudes toward work and their aspirations and expectations for the future. A seven-page executive summary is included. (BW)

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PATHWAYS TO THE FUTURE

A Report on the National Longitudinal Survey of Youth Labor Market Experience in 1979

May 1981

Center for Human Resource Research

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The Ohio State University

PATHWAYS TO THE FUTURE

A Report on the National Longitudinal Survey of Youth Labor Market Experience in 1979

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May 1981

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PREFACE

This report covers the first survey of a cohort of youth who were age 14-21 on January 1, 1979. The cohort will be interviewed annually for the next five years to trace the experiences of the youth over the period. The purpose of these surveys is to better understand the factors affecting success in the labor market and in life generally.

This cohort of youth is part of the National Longitudinal Surveys of Labor Force Experience (NLS), which were begun in 1966. Funding for the NLS comes from the Office of Research and Development and Office of Youth Programs, Employment and Training Administration, U.S. Department of Labor. We would like to acknowledge the great help of the present directors of these offices, Burt Barnow and Richard Gilliland, their former directors Howard Rosen and Robert Taggart, and the project officer, Ellen Sehgal. Supplemental funding for this cohort has been provided by the Office of the Secretary of Defense and the armed services.

Overall responsibility for the NLS rests with the Center for Human Resource Research, The Ohio State University, who design the questionnaires, analyze the data and provide the data to the public. Sample design and data collection for the youth cohort were conducted by the National Opinion Research Center (NORC). The Survey Director at NORC for this project was Celia Homans; sampling design was the responsibility of Martin Frankel. Other NORC senior staff who made substantial contributions were Mary Catherine Burich, Wendi Kreitman, and Karin Steinbrenner.

Many individuals at the Center for Human Resource Research have been engaged in this study in addition to the authors of this report. While it is not possible to acknowledge all of them we would particularly like to thank: Timothy Brown, Susan Carpenter, Stephanie Campbell, Ronald D'Amico, Thomas Daymont, Dennis Grey, Jean Haurin, Sherry McNamara, Stephen Hills, Rufus Milsted, Frank Mott, Ellen Mumma, Gilbert Nestel, Kathi Niehaus, Herbert Parnes, Patricia Shannon, Lois Shaw, Carol Sheets, and Kezia Sproat.

Michael E. Borus

EXECUTIVE SUMMARY

This is the first report on a nationally representative sample of the 32.9 million civilian young people who were ages 14-21 on January 1, 1979. This same sample of youth will be surveyed yearly through 1984 as part of the National Longitudinal Surveys (NLS). In this report policy makers will learn about the employment and unemployment status of these young persons, their reactions to school, their assessment of Federal Government training programs, their vocational training, their attitudes toward work and their aspirations and expectations for the future.

This first survey shows that young Americans are very much interested in work. More than half of these young persons were either working or looking for work. About four out of five of these youth would continue to work even if they were economically well off. Approximately 14 million of the youth 16-21 had jobs and 3.3 million were looking for work during the Spring of 1979. Apparently the desire to work begins at a very early age: about 1.8 million 14 to 15 year old youngsters were already working at the time of this survey.

Young blacks and women are seriously committed to the work ethic. The data show that black youths are more willing to take jobs in the private sector than are whites.

Substantial numbers of young people, both black and white, and particularly those who were 14-17 years old, were willing to take jobs at subminimum wages. It would appear that if a lower minimum wage were set for youth, many of the younger teenagers would accept jobs below the current minimum level. However, a majority of unemployed males age 16-19 are apparently seeking jobs above the average wage rate currently paid their employed counterparts. A cause of some unemployment among young persons may in fact be the consequence of their asking for wages that are higher than offered wages.

Many young persons carry both school and work responsibilities. Two-thirds of young persons age 14-21 on January 1, 1979 were enrolled in school. Three quarters were attending high school and one quarter were enrolled in college. Of youth age 16-21, six out of ten of the high school students were in the labor force, but one fourth of them could not find jobs. Half of the white high school students had jobs compared with only a quarter of the black students.

One in four young persons age 16-20 at the beginning of 1978 worked all year round, and over 40 percent were employed more than three-fourths of the year. The majority of employed youth, however, normally worked at part-time jobs; nearly a third of the total sample were employed fewer than twenty hours per week when interviewed. Most of those who worked had jobs located less than fifteen minutes from home. Nearly half of the employed high school students and more than a third of the working college students worked within five minutes from home. Yet 30 percent of all youth age 16-21 said that transportation difficulties had caused them problems in getting good jobs.

The majority of unemployed young people sought only part-time employment, and most were also enrolled in school and living with their parents; the hardship of unemployment was reduced for these youth. But there remained 1.6 million unemployed youth who were out of school, 1.5 million who sought full time jobs, 400,000 who had children, and 800,000 who came from poverty homes.

Discrimination in the labor market continued to cause problems for youth. Among out of school youth, black males earned 11 percent less per hour and Hispanic males 6 percent less per hour than did comparable white youth. Females earned 20 percent less per hour than did comparable males. The differences between minority and white females were not significant. Whites were more positive about the characteristics of their jobs than were minorities and were more likely to say that they liked their jobs very much. In addition, minorities were found to have two to three times the probability of not working at all during the year of 1978; the mean number of weeks worked was approximately one third lower for blacks than for whites. Whites were also more likely than minorities to have worked at more than one job during the year.

This survey further documents the unemployment problems of black and Hispanic youth in our society. White males had a higher labor force participation rate than minority males, and obtaining employment was a less severe problem for them than for blacks and Hispanics. Over a third of black males age 16-21 could not find jobs. Although Hispanic males had lower unemployment rates than blacks, the rates of white young men were lowest.

Black young women had the highest unemployment rate and the lowest employment/population ratio of all the race-sex groups. Although getting older appeared to decrease the unemployment rate for all youth, unemployment was concentrated among minority males and females regardless of age.

About half of the unemployed black and Hispanic youth age 16-22 came from families with annual incomes of $10,000 or less, but only a fourth of the unemployed white youths were in families with that income level. About half of the unemployed youth said they wanted to work because they needed the money.

Minorities had equal aspirations for education, were more willing to work at private sector jobs at given wages than their white counterparts, and were seeking employment as conscientiously as white youth. The difference appeared to be that employers discounted their contribution as employees because of their race or ethnic background.

A substantial proportion of youth on the threshold of their adult working lives felt directly affected by labor market discrimination based on race or nationality. About one in five black and Hispanic youth age 16-22 felt that discrimination by race or nationality caused some of their employment problems. Youth from poverty households were significantly more likely to perceive themselves as having been adversely affected by racial, nationality or sexual discrimination.

One in eight youth age 14-21 was a high school dropout in 1979. Among those 18-21 years old, about 14 percent of the whites, 25 percent of the blacks, and 35 percent of the Hispanics had not finished high school. Forty percent of the Hispanic dropouts had left school because of economic reasons, home responsibilities, good job offers or financial difficulties. The socioeconomic background of the students accounted for virtually all the racial differences in dropout rates.

Many young persons--and this is particularly true for black young men--drop out of school and begin immediately to have employment problems which persist through most of their adult working lives. Nearly seven out of ten white and Hispanic male high school dropouts age 16-21 held jobs in the Spring of 1979 compared to only 55 percent of the black dropouts. Dropouts were about two and a half times more likely than graduates not to have worked in 1978. Female dropouts were less likely to be employed or looking for work than males. Younger females suffered more unemployment problems than older ones, regardless of school enrollment, but unemployment was especially prevalent among young female dropouts.

A significant number of young persons in our society in 1979 were not working, not looking for work, and not attending school. Some 1.8 million persons age 16-21 fit in this category. Although most of these young persons were females with family responsibilities, some 400,000 young men were apparently not participating in the work force or attending school.

The income and education of parents seemed important in determining whether high school students were enrolled in general, college preparatory or vocational programs. Students from families living below the poverty levels were less likely than others to be in college preparatory programs; those whose parents failed to finish high school were twice as likely to be in vocational programs and less than half as likely to be in college preparatory programs as those students whose parents completed college.

A full 42 percent of the black youth population had participated in some sort of government employment and training program by the time they left adolescence. These youngsters received basic education services from government programs, which supplemented the school system for minorities. The programs were alleviating high unemployment among minorities and the economically disadvantaged by providing opportunities for continuing education for some and income during periods of high unemployment for others.

About 2.6 million young men and women had participated in government training programs between the first day of 1978 and their interview date in 1979. Some 1.6 million had been in programs before that time, making a total of about 13 percent of young people age 14-21 who had been in government programs. Participants in these programs tended to be the most disadvantaged as measured by race and income.

The most common services offered to youth in government programs were subsidized employment and counseling. Often, the young participants were also given classroom training for particular skills and remedial education. Most of the respondents said they had enrolled in programs to make money.

The majority of young persons age 16-21 said they would like to have training beyond formal education. This response suggests a widespread potential for participation in training programs outside the regular school system. Of the 16.6 million youth age 16-22 who were out of high school, almost 2 million had participated one month or more in vocational training since leaving high school.

Females were as dedicated as males to the training process. However, segregation by sex in vocational training was as complete as it is in employment. The occupations for which young women were being trained in 1979 were the same lower paying, lower status and lower skilled occupations in which women are now concentrated as workers.

Comparing the young women in the 1968 NLS with those surveyed in 1979, we see that young women in 1979 will be much more likely to participate in the work force than their older counterparts. A sharp increase was observed in the proportion of young women who expected to be employed as adults. The young women of 1979 had less traditional and higher occupational aspirations than their work-oriented counterparts of the late 1960s. The young women of the 1979 survey also reported that they expected to have fewer children than those surveyed in 1971. The 1979 survey further showed that early marriage or early parenthood was consistently associated with lower educational and occupational aspirations.

In 1979 significant proportions of young people age 14-21 participated in the labor force even before they left school.

Both the males and the females in this generation show a vigorous commitment to the labor market.

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CHAPTER 1

INTRODUCTION

by Michael E. Borus

This monograph analyzes data from the 1979 National Longitudinal Survey of Youth Labor Market Experience (NLS). These are the first data on the sample known as the NLS youth cohort, who will be interviewed annually at least through 1984. The NLS youth cohort is a national sample of 12,686 young people born in the calendar years 1957 through 1964, who were thus age 14-21 on January 1, 1979. Of these, 11,406 were civilians selected from over 70,000 households in 160 Standard Metropolitan Statistical Areas and counties which were screened for eligible civilian youth. This sample was stratified in order to yield approximately equal numbers of men and women, and oversampled Hispanics, non-Hispanic blacks, and non-Hispanic, nonblack, youth from families with incomes below the poverty line.[1]

Interviews were also conducted with a sample of 1,280 persons (827 males and 453 females) within the age group who were serving in the armed forces on September 30, 1978.[2] This sample was selected to yield approximately two-thirds males and one-third females, a heavy overrepresentation of females.

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[1] The poverty lines were taken from the Office of Management and Budget Guidelines and adjusted by the change in the Consumer Price Index between January and October, 1978. For details of the sampling design, see Appendix 1A. The Sample is composed of 1,924 Hispanic youth, 946 males and 978 females; 2,923 non-Hispanic black youth, 1,444 males and 1,479 females; 2,044 non-Hispanic, nonblack youth who met the poverty criteria, 744 males and 899 females; and a cross section of 4,515 non-Hispanic, nonblack youth, 2,441 males and 2,475 females. The cross section included youth from both poverty and nonpoor households.

In the analyses which follow, persons are identified by their characteristics when interviewed[3]--that is, between the end of January, 1979 and August, 1979. The vast majority of interviews were completed during February, March, April, and May.[4] Information on civilian or military status is also as of the date of interview: individuals selected from the military list who had become civilians by the time of interview are included in the civilian totals, and vice-versa. This report focuses on the experience of the civilians.

All individuals were assigned a weight indicating their probability of being selected and interviewed.[5] These weights were used in generating the data presented here, which represent the experiences of the approximately 32,870,000 noninstitutionalized youth in the United States in this age cohort. The number of youth represented in each analysis is noted at the bottom of each table.[6]

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[2] These individuals were selected from a list provided by the armed forces. The military respondents included persons serving overseas as well as in the United States.

[3] Exceptions are racial-ethnic designation and sex, which were gathered in the household screening interviews conducted between September, 1978 and March, 1979 or from military records.

[4] In some cases, where the variables being examined are likely to be affected by seasonality, individuals interviewed after May, 1979 are assumed to be distributed proportionately to those interviewed earlier.

[5] The mean weights are 1,089 for Hispanic males; 1,065 for Hispanic females; 1,534 for non-Hispanic, black males; 1,564 for non-Hispanic, black females; 879 for non-Hispanic, nonblack economically disadvantaged males; 761 for non-Hispanic, nonblack economically disadvantaged females; 4,246 for non-Hispanic, nonblack males and 4,273 for non-Hispanic, nonblack females. For further details, see Appendix 1A.

I. CHARACTERISTICS OF THE YOUTH POPULATION

Tables 1.1 to 1.4 provide the basic characteristics of the youth by race, sex, age and poverty status.[7] Approximately 4,520,000 or 13.7 percent of the youth age 14-21 on January 1, 1979 are black; 2,070,000 or 6.3 percent are of Hispanic origin; and the remaining 26,280,000 or 80.0 percent are neither Hispanic nor black. We labeled this last group "white" although a small proportion, in the neighborhood of 2 percent, are Native Americans or of Asian or Pacific Island descent. The population is divided almost equally between males and females, with slight preponderances of females among the blacks and Hispanics and males among the whites.

The age distribution of the population according to our data should be noted carefully. The sample weights were adjusted to Census Bureau estimates of the population by year of birth.[8]

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[6] Unless otherwise specified, persons not answering questions were distributed among the categories proportionately to those who did respond.

[7] There may be slight variations among the tables in this report because of rounding and truncation by the computer. Differences of up to one-tenth of a percent or 10,000 persons can be caused by these factors and should be ignored. Likewise, tables may not sum to the totals due to rounding.

[8] These figures were calculated by taking the average of the numbers of 13 and 14 year olds as of July 1, 1978 and using this figure for 14 year olds on January 1, 1979. The procedure was repeated for each year (U.S. Bureau of the Census, 1979: 15).

Table 1.1 Selected Characteristics, by Race (in Thousands)

Characteristic	Black		Hispanic		White		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Sex								
Female	2,311	51	1,042	50	13,084	50	16,436	50
Male	2,203	49	1,031	50	13,197	50	16,431	50
Age								
14-15	1,046	23	500	24	5,764	22	7,309	22
16-17	1,138	25	516	25	6,558	25	8,213	25
18-19	1,160	26	510	25	6,623	25	8,294	25
20-22	1,171	26	546	26	7,345	28	9,062	28
Region								
Northeast	837	18	421	20	5,779	22	7,037	21
North Central	873	19	168	8	8,923	34	9,964	30
South	2,534	56	581	28	7,421	28	10,535	32
West	272	6	903	44	4,166	16	5,340	16
Enrollment status								
High school dropout	686	15	477	23	2,550	10	3,712	11
High school student	2,392	53	1,036	50	12,740	48	16,168	49
College student	531	12	226	11	4,421	17	5,178	16
Nonenrolled high school graduate	906	20.1	334	16	6,576	25	7,815	24
Educational attainment								
0-8	978	22	600	29	4,685	18	6,263	19
9-11	2,100	46	913	44	10,604	40	13,616	41
12	985	22	370	18	7,072	27	8,427	26
13 or more	452	10	189	9	3,927	15	4,569	14
With a health limitation	277	6	107	5	1,631	6	2,016	6
Participated in government sponsored employment and training program								
Ever	1,434	32	437	21	2,335	9	4,206	13
During 1978	738	16	222	11	1,111	4	2,071	6
Marital and family status								
Never married	4,225	94	1,769	85	23,315	89	29,309	89
Married	207	5	248	12	2,599	10	3,054	9
Separated, widowed, divorced	81	2	55	3	360	1	495	2

Table 1.1 (continued)

Characteristic	Black		Hispanic		White		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Has children	590	13	220	11	1,665	6	2,476	8
Family income								
Less than $5,000	785	17	301	14	1,522	6	2,608	8
5,000-9,999	1,057	23	480	23	2,741	10	4,278	13
10,000-14,999	680	15	317	15	2,903	11	3,901	12
15,000-19,999	446	10	205	10	2,959	11	3,610	11
20,000-24,999	245	5	147	7	3,295	12	3,687	11
25,000-29,999	143	3	102	5	2,306	9	2,550	8
30,000-39,999	138	3	82	4	2,689	10	2,909	9
40,000 or more	82	2	59	3	2,321	9	2,463	8
Not available	938	21	380	18	5,557	21	6,875	21
Poverty status								
Poor	1,475	33	555	27	1,871	7	3,901	12
Nonpoor	2,102	47	1,137	55	18,856	72	22,094	67
Not available	938	21	380	18	5,557	21	6,875	21
Employment status[a]								
Employed	1,346	40	721	48	11,996	61	14,073	57
Unemployed	842	25	218	14	2,267	12	3,322	14
Out of labor force	1,161	35	579	38	5,441	28	7,176	29
Total	4,515	14	2,072	6	26,280	80	32,867	100

[a] Only for persons who were 16-21 on the date of interview.

UNIVERSE: Civilians age 14-21 on January 1, 1979. (N = 32,870,000)

Table 1.2 Selected Characteristics, by Sex (in Thousands)

Characteristic	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Age						
14-15	3,532	22	3,777	23	7,309	22
16-17	4,086	25	4,126	25	8,212	25
18-19	4,218	26	4,076	25	8,294	25
20-22	4,606	28	4,458	27	9,063	28
Region						
Northeast	3,523	21	3,514	21	7,037	21
North Central	4,785	29	5,181	32	9,967	30
South	5,484	33	5,053	31	10,537	32
West	2,650	16	2,690	16	5,340	16
Enrollment status						
High school dropout	1,767	11	1,945	12	3,712	11
High school student	7,748	47	8,419	51	16,167	49
College student	2,580	16	2,598	16	5,178	16
Nonenrolled high school graduate	4,346	26	3,470	21	7,815	24
Educational attainment						
0-8	2,870	18	3,393	21	6,263	19
9-11	6,645	40	6,974	42	13,619	41
12	4,520	28	3,907	24	8,428	26
13 or more	2,407	15	2,161	13	4,569	14
With a health limitation	1,226	8	790	5	2,016	6
Participated in government sponsored employment and training program						
Ever	2,066	13	2,140	13	4,206	13
During 1978	976	6	1,095	7	2,071	6
Marital and family status						
Never married	13,812	84	15,489	94	29,301	89
Married	2,196	13	859	5	3,054	9
Separated, widowed, divorced	425	3	71	*	495	2
Has children	1,942	12	534	3	2,476	8

Table 1.2 (continued)

Characteristic	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Family income						
Less than $5,000	1,432	9	1,176	7	2,608	8
5,000-9,999	2,111	13	2,167	13	4,278	13
10,000-14,999	1,885	12	2,015	12	3,900	12
15,000-19,999	1,756	11	1,854	11	3,610	11
20,000-24,999	1,858	11	1,829	11	3,687	11
25,000-29,999	1,227	8	1,323	8	2,550	8
30,000-39,999	1,380	8	1,528	9	2,909	9
40,000 or more	1,097	7	1,366	8	2,463	8
Not available	3,697	22	3,178	19	6,875	21
Poverty status						
Poor	2,041	12	1,860	11	3,901	12
Nonpoor	10,700	65	11,392	69	22,092	67
Not available	3,697	22	3,178	19	6,875	21
Employment status[a]						
Employed	6,673	54	7,407	61	14,076	57
Unemployed	1,747	14	1,574	13	3,322	14
Out of labor force	4,033	32	3,140	26	7,176	29
Total	16,436	50	16,431	50	32,867	100

*Percentage is 0.1 - 0.5

[a] Only for persons 16-21 on date of interview.

UNIVERSE: Civilians age 14-21 on January 1, 1979. (N = 32,870,000)

Table 1.3 Selected Characteristics, by Age (in Thousands)

Characteristic	14-15		16-17		18-19		20-22		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Region										
Northeast	1,515	21	1,767	22	1,726	21	2,027	22	7,037	21
North Central	2,207	30	2,502	30	2,644	32	2,614	29	9,967	30
South	2,363	32	2,711	33	2,572	31	2,891	32	10,537	32
West	1,224	17	1,233	15	1,352	16	1,531	17	5,340	16
Enrollment status										
High school dropout	125	2	749	9	1,486	18	1,353	15	3,712	11
High school student	7,181	98	7,318	89	1,609	19	62	1	16,171	49
College student	1	0	68	1	2,452	30	2,658	29	5,178	16
Nonenrolled high school graduate	1	0	76	1	2,748	33	4,991	55	7,815	24
Educational attainment										
0-8	5,087	70	543	7	316	4	315	4	6,263	19
9-11	2,221	30	7,519	92	2,778	34	1,100	12	13,618	41
12	2	0	148	2	4,179	50	4,099	45	8,428	26
13 or more	0	0	0	0	1,021	12	3,549	39	4,569	14
With a health limitation	382	5	432	5	538	6	664	7	2,016	6
Participated in government sponsored employment and training program										
Ever	333	5	908	11	1,352	16	1,613	18	4,206	13
During 1978	302	4	642	8	675	8	451	5	2,071	6
Marital and family status										
Never married	7,287	100	8,048	98	7,344	89	6,637	73	29,316	89
Married	14	*	141	2	837	10	2,062	22	3,054	9
Separated, widowed, divorced	1	0	20	*	112	1	362	4	495	2
Has children	52	1	153	2	710	8	1,561	17	2,476	8

Table 1.3 (continued)

Characteristic	14-15		16-17		18-19		20-22		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Family income										
Less than $5,000	385	5	489	6	669	8	1,065	12	2,608	8
5,000-9,999	969	13	914	11	1,058	13	1,337	15	4,278	13
10,000-14,999	909	12	955	12	904	11	1,133	12	3,900	12
15,000-19,999	963	13	1,058	13	704	8	885	10	3,610	11
20,000-24,999	1,080	15	1,067	13	802	10	738	8	3,687	11
25,000-29,999	627	9	701	8	674	8	548	6	2,550	8
30,000-39,999	616	8	769	9	829	10	694	8	2,909	9
40,000 or more	446	6	668	8	694	8	655	7	2,463	8
Not available	1,314	18	1,591	19	1,961	24	2,009	22	6,875	21
Poverty status										
Poor	947	13	996	12	926	11	1,032	11	3,901	12
Nonpoor	5,049	69	5,625	68	5,407	65	6,022	66	22,103	67
Not available	1,314	18	1,591	19	1,961	24	2,009	22	6,875	21
Employment status[a]										
Employed			3,606	44	5,041	61	5,446	68	14,078	57
Unemployed			1,433	17	1,110	13	774	10	3,322	14
Out of labor force			3,173	39	2,141	26	1,851	23	7,176	29
Total	7,309	22	8,213	25	8,294	25	9,062	28	32,878	100

*Percentage is 0.1 - 0.5

[a] Only for persons 16-21 on date of interview.

UNIVERSE: Civilians age 14-21 on January 1, 1979. (N = 32,880,000)

Table 1.4 Selected Characteristics, by Poverty Status (in Thousands)

Characteristic	Poor		Nonpoor		Not available		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Region								
Northeast	806	21	4,704	21	1,526	22	7,037	21
North central	893	23	7,134	32	1,939	28	9,966	30
South	1,627	42	6,555	30	2,355	34	10,537	32
West	576	15	3,709	17	1,054	15	5,340	16
Enrollment status								
High school dropout	853	22	1,877	8	985	14	3,712	11
High school student	1,894	48	11,233	51	3,040	44	16,169	49
College student	509	13	3,576	16	1,093	16	5,178	16
Nonenrolled high school graduate	646	17	5,412	24	1,756	26	7,815	24
Educational attainment								
0-8	1,078	28	3,976	18	1,210	18	6,263	19
9-11	1,669	43	9,132	41	3,815	41	13,617	41
12	689	18	5,824	26	1,915	28	8,428	26
13 or more	467	12	3,167	14	935	14	4,569	14
With a health limitation	299	8	1,287	6	430	6	2,016	6
Participated in government sponsored employment and training program								
Ever	995	26	2,397	11	814	12	4,206	13
During 1978	580	15	1,168	5	323	5	2,071	6
Marital and family status								
Never married	3,607	92	19,841	90	5,861	85	29,309	89
Married	195	5	1,988	9	871	13	3,054	9
Separated, widowed, divorced	100	2	256	1	140	2	495	2
Has children	452	12	1,252	6	772	11	3,476	8
Family income								
Less than $5,000	2,178	56	429	2	0	0	2,608	8
5,000-9,999	1,544	40	2,734	12	0	0	4,278	13
10,000-14,999	179	5	3,722	17	0	0	3,900	12
15,000-19,999	0	0	3,610	16	0	0	3,610	11
20,000-24,999	0	0	3,687	17	0	0	3,687	11
25,000-29,999	0	0	2,550	12	0	0	2,550	8
30,000-39,999	0	0	2,909	13	0	0	2,909	9
40,000 or more	0	0	2,463	11	0	0	2,463	8
Not available	0	0	0	0	6,874	100	6,874	21
Employment status[a]								
Employed	1,089	38	10,092	62	2,880	54	14,075	57
Unemployed	644	23	1,922	12	761	14	3,322	14
Out of labor force	1,103	39	4,395	27	1,688	32	7,177	29
Total	3,901	12	22,094	67	6,875	21	32,871	100

[a] Only for persons who were 16-21 on the date of interview.

UNIVERSE: Civilians age 14-21 on January 1, 1979. (N = 32,870,000)

Although the sample was selected by year of birth, the age variable indicates age at the time of interview. Some of the sample had passed another birthday between the first of the year and the time they were interviewed.[9] Thus, when data are presented by age, those age 14 and 15 in our population are slightly older than all persons in this age group, and those age 20 to 22 are on average younger than the general population. For most analyses, however, the effect of these age discrepancies is quite small.

The determination of 1978 family income in our data set suffers from sizeable nonresponse, a common problem of surveys seeking income data. Youth and their parents were unable or unwilling to provide a complete estimate of family income for 6,875,000 persons, or 21 percent of the population. To deal with nonresponse, some surveys, including the Current Population Survey, impute a family income for nonrespondents and others distribute the nonrespondents proportionally across the income categories. Because both of these procedures may bias the estimate, we have treated the nonrespondents as a separate category. If the nonrespondents are distributed proportionately to increase the number of persons in families at each income level, we find that 15 percent of the youth are in families whose 1978 incomes place them below the poverty line used by the Census

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[9] Of the group who were 21 years of age on the first of January 980,000 had their twenty-second birthday by the date of the interview and approximately 680,000 of those who were 14 on January 1, had their fifteenth birthday by the time they were interviewed in the Spring.

Bureau in the Current Population Survey. As expected, there are substantial differences by race. Among blacks, 41 percent live in families below the poverty line. The corresponding figure for Hispanics is 33 percent and for whites 9 percent.[10]

Racial Differences

Table 1.1 shows selected characteristics by race. Black youth are very heavily concentrated in the South, where over half reside, and they are substantially underrepresented in the North Central states and the West. A larger proportion of blacks are attending high school than the other two groups, perhaps because blacks in our sample are somewhat younger than the whites. On the other hand, lower proportions of blacks than whites are college students and high school graduates not enrolled in college, and higher proportions of blacks are high school dropouts. Overall, the educational attainment of the black sample is less than that of the whites.

A slightly smaller proportion of the blacks have been married, although more of the black young women, proportionately, have had children. Not only is the family income of black youth considerably below that of whites, but they also have much lower employment to population ratios and higher unemployment rates than Hispanics or whites. These factors may account, in part, for the substantially higher participation rates of blacks in government-sponsored employment and training programs.

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[10] Interpretation of the family income data should be made with extreme care. Some of the youth will be in relatively low income single person households because they have left their parental homes. Others are still living with their parents and low incomes for their families are much more serious.

The Hispanic sample is concentrated much more heavily in the West, and like blacks, are underrepresented in the North Central states. Hispanics are more than twice as likely as whites and one and one-half times as likely as blacks to be high school dropouts. Their educational deficiencies are shown further by their lower average years of schooling completed. More of the Hispanic youth are or have been married than either blacks or whites, and more of them have children than do whites. Their family income tends to be lower than that of whites but higher than that of blacks; they are also in an intermediate position between blacks and whites in employment to population ratios and percentage unemployed.

The white sample constitutes four-fifths of the youth population. While whites are better off, on average, than the minorities, substantial numbers have problems. About 2,550,000 in our age cohort are high school dropouts, at least 1,870,000 live in families where the income is below the poverty line, 1,630,000 have a health limitation which prevents them from working or limits the kind or amount of work which they can do, and 2,270,000 of those age 16 and older are unemployed.

Sex Differences

There are relatively few demographic characteristic differences between young males and females. A slightly higher proportion of the males are still in high school, but this probably results from the lower mean age of our male population. We do find higher rates of marriage and parenthood among the females and a somewhat higher rate of health limitations. The incidence of poverty is 16 percent among young women versus 14 percent among males. Finally, the employment to population ratio for males age 16-21 is somewhat higher, although the difference of 8 percentage points or 14 percent is not as large as one might expect.

Age Differences

Not surprisingly, school enrollment is highly related to age. Likewise, age is directly related to participation in government employment and training programs. The proportion of youth who have participated in such a program rises from about 5 percent for 14 and 15 year olds to 18 percent for the oldest age group. The frequency of marriage also increases with age: only two-tenths of 1 percent of 14 and 15 year olds have been married, but 27 percent of the oldest age group was or is married. Also increasing with age is the proportion of the youth who have had children; even among the youngest age group, approximately 1 percent already have a child and 2 percent of 16 and 17 year olds have one or more children. Family income is also related to age: larger percentages of the 18 and older groups live in households with family incomes less than $5,000, doubtless because older youth leave their parental homes and start their own households. There is a very slight reduction in the incidence of poverty as age increases. Finally, the employment to population ratio and labor force participation rates increase with age while the percent unemployed declines markedly. The unemployment rate falls from 28 percent for 16-17 year olds to 12 percent for 20-21 year olds.

Poverty Status

Fifteen percent of the youth for whom 1978 income information was secured fell below the Current Population Survey poverty lines. As mentioned above, poverty was much more prevalent among blacks and Hispanics than among whites. Poverty was more heavily concentrated among youth in the South (20 percent), among high school dropouts (31 percent) and among youth with children (27 percent). Among the poor 16-21 year olds, the unemployment rate was 37 percent as compared with 16 percent for the nonpoor. Finally, about three times more poor than nonpoor participated in 1978 government sponsored employment and training programs targeted at the economically disadvantaged.[11]

II. OUTLINE OF THE VOLUME

This volume is a descriptive presentation of the status of youth in the Spring of 1979--their position and problems in the labor market; their reactions to school and the factors influencing their schooling decisions; their training, both the government sponsored and other vocational training which they receive; their health status; and their attitudes, both towards their present situations and the future. Topics are treated broadly and emphasis is put on describing rather than on developing statistical models. Thus, while some advanced statistical techniques are used, the volume also contains many simple cross-tabular presentations. Each of the chapters differentiates the various groups who make up the youth population and examines differences by race, sex, employment status, enrollment status, educational attainment and family background, incuding poverty status.

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[11] The reader may wonder why any of the nonpoor participated. Individuals may have been in poor families when they entered a program but left those families by the time of the interview and it is the household characteristics at the interview which are being used to determine poverty status. In addition, eligibility requirements differ among the programs with some allowing family income above the poverty lines, some types of income are not included in program eligibility calculations, eligibility may be based on periods of less than one year or established prior to 1978, and eligibility may be established based on characteristics such as receiving welfare or being an exoffender.

Five general areas are covered: labor market behavior of the youth as employees; factors relating to looking for work; school and training participation; health; and perceptions of discrimination and attitudes toward work. A final chapter discusses the policy implications which emerge from these descriptions.

Chapter 2 describes the labor force participation and employment status of the youth for the week in which they were interviewed in the Spring of 1979. The NLS data are compared to the Current Population Survey (the government's standard measure of employment status). Chapter 3 examines the employment conditions for those youth who were employed at the time of the survey. Hours of work, occupation, industry, job satisfaction, travel time to work, and the factors affecting the wage rate at which young people work are examined. Chapter 4 presents the work experience of the youth for the preceding year, 1978, and analyzes the determinants of weeks worked and unemployed during the year and job turnover.

Chapter 5 discusses the job search motives and techniques of youth, both the employed and the unemployed. The willingness of youth to accept specific jobs at various wages, and the wages at which unemployed young men will accept the job they are seeking are also examined in this chapter.

Schooling and training, important determinants of labor market success, are the focus of the third section. Chapter 6 studies the attitudes of young people toward high school, their high school programs and reasons for not completing high school and for attending college. Chapter 7 examines participants in government sponsored training programs, the types of services they receive and their attitudes toward these programs. Chapter 8 deals with the post-high school training provided outside of regular schools, government programs and the military.

The fourth section deals with another important determinant of success, health. Chapter 9 studies the health status of young people at the time they were interviewed. The fifth section contains two chapters dealing with the perceptions, aspirations and attitudes of young people. Chapter 10 details the extent of age, race, sex discrimination felt by young people as well as their perception of the difficulties they have in the labor market. Chapter 11 examines the educational, occupational and fertility aspirations and expectations of the young people as well as their desire for further training. Chapter 12 presents a summary of the major findings in the volume.

APPENDIX 1A--SAMPLING, WEIGHTS, AND SAMPLING ERRORS

by Martin Frankel

I. SAMPLE DESIGN

The 1979 National Longitudinal Survey of Youth made use of three independent probability samples. Two of these samples were designed to cover the noninstitutionalized civilian population in the age range 14-21 (as of January 1, 1979). A third sample was designed specifically to cover the military portion of the 14-21 age cohort.

The two samples which cover the civilian portion of the age cohort will be referred to by the terms "cross-sectional" and "supplemental." The study design for the 1979 National Longitudinal Survey of Youth required extensive disproportionate oversampling among Hispanic, black, and economically disadvantaged non-Hispanic nonblack youth. The cross-sectional sample was designed to yield approximately 3,000 males and 3,000 females, with various racial, ethnic, and income groups represented in their proper population proportions. The supplemental sample was designed to produce, in the most statistically efficient way, the required oversamples of Hispanics, blacks and economically disadvantaged non-Hispanic nonblacks. The distribution of 1979 sample cases across these two samples is shown in Table 1.

Cross-Sectional Sample

The cross-sectional sample used for the noninstitutionalized civilian portion of the 14-21 youth cohort was

TABLE 1A.1

DISTRIBUTION OF COMPLETED CASES ACROSS CROSS-SECTIONAL AND SUPPLEMENTAL SAMPLES

	SAMPLE SIZE		
POPULATION GROUP	CROSS-SECTIONAL	SUPPLEMENTAL	TOTAL
MALE			
HISPANIC	216	730	946
NON-HISPANIC BLACK	347	1,097	1,444
NON-HISPANIC NONBLACK ECONOMICALLY DISADVANTAGED	203	744	947
OTHER	2,239	-	2,239
FEMALE			
HISPANIC	228	751	979
NON-HISPANIC BLACK	404	1,075	1,479
NON-HISPANIC NONBLACK ECONOMICALLY DISADVANTAGED	198	899	1,097
OTHER	2,277	-	2,277

based upon the 102 primary sampling units (PSUs) in the NORC National Probability Sample. This sample was developed and initially used in 1973. The sample has been continuously updated since that time. The sampling frame covers the continental United States.

Stage I. The primary sampling units are composed of: Standard Metropolitan Statistical Areas (SMSAs), counties,[1] parts of counties,[2] and independent cities. Stratification criteria used in the first stage of selections include: Census Division, SMSA/non-SMSA, county size, and percentage black. The selection of primary units was carried out with probabilities proportional to 1970 Census population, using replicated "zone" selection. A total of 204 PSUs was selected. In this survey, we made use of two of the four replicates comprising 102 PSUs.

Stage II. The secondary units of selection are block groups (BGs) in areas for which Census blocks have been designated, and enumeration districts (EDs) in unblocked areas. Prior to selection, the second-stage (within-PSU) frame of EDs and BGs was stratified on the basis of median family income and percentage black.[3] For each primary sampling unit, eighteen secondary selections were made with probability proportional to size from eighteen equal-size zones. A subsample of nine secondary units was used for the 1979 National Longitudinal Survey of Youth.

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[1] Where necessary, counties were combined so that their aggregated 1970 population exceeded 12,000.

[2] In New England, we defined the portion of a county outside an SMSA as a PSU.

[3] In areas that were not tracted, median household income and percentage black were estimated using a regression routine based

Stage III. Whenever possible, secondary selections were subdivided[4] into third stage listing units (segments).[5] One listing unit was then selected for each secondary selection with probability proportional to estimated housing. If it was impossible to subdivide a secondary selection into well-defined subunits, this stage of sampling was bypassed (i.e., subsampling at Stage III was accomplished with probability one).

NORC interviewers have carried out dwelling unit listing within all third-stage segments. Prior to initial use, those listings were subjected to a number of checks.[6] In order to maintain an accurate record of dwelling units, master sample listings are periodically updated. This updating procedure occurs at the end of the field period for each research study. During the updating period, and in conjunction with NORC's "missed dwelling unit" procedure, information is gathered regarding changes in the entire segment (e.g., demolition of DUs, new construction). This information is then integrated into our

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on MCD or tract information.

[4] For BGs we employed Block Statistics, for EDs we made field counts.

[5] The minimum size for listing units was 100 dwelling units (DUs).

[6] A comparison was made with Census estimates and/or field counts. Also, a number of internal consistency checks for sequential listing and procedures were initiated.

computer-based Master Listing of NORC PSUs.

Stage IV. Approximately 20,500 listed DUs and IQs[7] were screened (household rosters were obtained) for the cross-sectional sample. Stage III segments were subsampled in order to produce an equal probability sample of households and individual quarters distributed among the 918 segments (102 PSUs x 9 segments per PSU). Selection of these listings was accomplished through the use of ANSPAK (NORC's computerized sampling program package). There were an average of 22 selected dwelling units and IQs per sample cluster resulting in an average of 6.8 in-scope youths. All in-scope youths found in this screening stage were designated for subsequent interview.

Supplemental Sample

As noted previously, this sample was designed specifically to yield a highly efficient sample of the three youth cohorts designated for oversampling (i.e., Hispanics, non-Hispanic blacks and non-Hispanic nonblack economically disadvantaged). Thus for this sample, stratification specifically relevant for these groups was used. In addition, Probability Proportional to Size (PPS) procedures were based on size measures for these cohorts rather than the general population. In multi-stage samples, PPS procedures are used in order to achieve control over the distribution of sample cases among the primary sampling units and within the ultimate clusters that form the primary sampling units. By using size measures based on the three oversampled cohorts, it was possible to more nearly equalize the distribution of these groups among the various sampling units than would have been possible in a cross-sectional design which used PPS procedures based on total population.

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[7] Individual quarters (IQ) is a term used to describe non-dwelling unit non-institutional living quarters.

Stage I. Primary sampling units consisted of counties and independent cities. First-stage selection of these units was carried out with probabilities proportional to measures of size that reflected the black, Hispanic and economically disadvantaged population within the PSU. These measures of size were constructed from the 1970 Census Fifth Count (File C), which provided required estimates at the enumeration district-block group level within each county and independent city. Prior to use, 1970 size estimates were updated to 1977 Census estimates on a county basis.

For each primary sampling unit a measure of size (MOS) was constructed as

$$MOS_i = H_i + .5 \times B_i + ED_i ,$$

where H_i, B_i and ED_i denote the estimated population sizes for Hispanics, blacks and economically disadvantaged non-Hispanic nonblacks respectively.

Given that the measures of size need only reflect relative population size, and given the relatively uniform ratio of estimated 14-21 cohort to total population, no attempt was made to reapportion size measures to the youth cohort. The factor of

.5 applied to the black population in the construction of PSU measures reflected the fact that among the three population groups of interest the oversampling rate for blacks was approximately one-half the rate to be used for Hispanics and economically disadvantaged non-Hispanic nonblacks. Prior to sample selection, PSUs were stratified on the basis of the 9 standard Census Divisions. Within each of these divisions, further stratification was based upon Urban-Rural location (within or outside the SMSA). Finally, within each of the 18 major strata (9 divisions x 2 urban/rural classes) PSUs were ordered by proportion of PSU population containing target group members. A systematic "zone" selection procedure was used to select 100 primary sampling units with probabilities proportional to the previously discussed target group measures of size.

Stage II. Within selected primary units, the units of second stage selection were either Census block groups or enumeration districts. These second stage sampling units were assigned measures of size by the same procedure that had been used in constructing measures at the first stage of sampling. Since the first stage measures had been created by aggregating information at the block group and enumeration district level, from the Fifth Count File C Census tape, the process of assigning second stage measures was simply a disaggregation procedure.

Prior to selection, second stage units were sort ordered by estimated proportion of population containing members of the target population. Adjoining units were then linked, when necessary, in order to have a minimum size measure of 25.

Within each selected primary sampling unit, nine secondary units were selected using a systematic zone procedure with probabilities proportional to target group measures of size.

Stage III. Whenever possible, selected secondary selections were subdivided into third stage listing units (segments). One listing unit was then selected for each secondary selection with probability proportional to estimated housing. If it was impossible to subdivide a secondary selection into well defined subunits, this stage of sampling was bypassed (i.e., subsampling at stage III was accomplished with probability one). It should be noted that because measures of size used at stages I and II were based upon target population rather than total population, the number of housing units contained within any two third-stage segments with the same measure of size might be quite different. In general, we tried to make use of third stage segments containing measures of size in the range 25-50 with between 50 and 500 housing units.

NORC interviewers carried out dwelling unit listings within all 900 third stage segments. Prior to use, these listings were subjected to a number of internal and external checks. Listers were required to seek out reasons for differences between the number of housing units found at the time of listing and the number of housing units reported by the 1970 Census. Within each block, checks were made, where possible, for consistent ordering of street numbering of listed units.

Stage IV. The fourth stage of selection involved selecting a sample of dwelling unit and individual quarters listings within the 900 selected third-stage segments. Screening, which involved enumeration of all persons within selected dwelling units (on a family unit basis) was conducted in two waves. In general, selection of third stage listings was carried out with probabilities designed to equalize the overall probability of selection through the four stages of sampling. However, there was some degree of oversampling (increased probability of selection) among third stage units which were estimated to contain a higher proportion of individuals in the three population groups designated for overrepresentation (i.e., Hispanics, non-Hispanic blacks, and economically disadvantaged non-Hispanic and nonblacks).

The fourth stage of sampling resulted in the selection of approximately 65,000 listed lines (dwelling units and individual quarters) over the 900 third stage segments.

Stage V. Family unit screening of selected dwelling units and individual quarters selected at stage IV produced somewhat more individuals in the Hispanic and non-Hispanic black cohorts than were required. As a result, it was necessary to select a subsample of these individuals for base year interviewing. Table II shows the number of individuals in each of the six oversampled cohorts that were located in the screening phase and the number selected for base year interviewing.

TABLE 1A.2

NUMBER OF INDIVIDUALS LOCATED IN SCREENING AND DESIGNATED FOR BASE YEAR INTERVIEW-SUPPLEMENTARY SAMPLE

DESIGN COHORT	LOCATED IN SCREENING	SELECTED FOR BASE YEAR INTERVIEW
MALES		
HISPANIC	1,015	854
NON-HISPANIC BLACK	1,318	1,268
ECONOMICALLY DISADVANTAGED (non-Hispanic nonblack)	887	886
FEMALES		
HISPANIC	1,060	855
NON-HISPANIC BLACK	1,502	1,204
ECONOMICALLY DISADVANTAGED (non-Hispanic nonblack)	1,073	1,073

Procedures used for the selection of individuals for base year interview were designed to equalize, as much as possible, final overall probabilities of selection for individuals within the same design cohort. Specifically, since some degree of differential oversampling was applied in the fourth stage selection of dwelling units for screening, individuals located in the screening process had not been selected with the same probabilities. Within the constraints of probability sampling, probabilties associated with the stage V subsampling process were set inversely proportional to the probabilities of selection for prior stages (i.e., product of stages I through IV). As a result, the variation in probability of selection among individuals (within a design cohort) retained in the sample after stage V was decreased from the variation in probabilities among all screened individuals within the same design cohort.

Special Procedures Used in Both the Cross-sectional and Supplemental Samples

There were several special procedures used in both the cross-sectional and supplemental samples to accomplish the following goals:

1. Inclusion of dwelling units in the sample which were either missed in the listing process or were constructed after the listing process took place
2. Inclusion in the sample of non-college individuals living in non-institutionalized, non-dwelling unit living arrangements
3. Inclusion in the sample of college students living in non-dwelling unit quarters

Procedures for inclusion of unlisted (missed) dwelling units. As part of its standard field methods, NORC makes use of a procedure to give a proper probability of selection to dwelling units that did not exist or were missed at the time of original listing or during segment updating. The method we employ is an application of the half-open interval technique. This procedure explicitly links every nonlisted DU in a segment with exactly one listed DU in that segment.

It should be noted that through the implementation of the half-open interval procedure each listed dwelling unit represents a cluster of dwelling units. This cluster is composed of the listed DU (line) and any other missed DUs associated with that line.

Conceptually, the procedure is simple. The set of DU listings (lines) for a segment is made up of one or more subsets of lines (blocks). Each block consists of an ordered set of lines. Each of the lines represents either a complete structure (i.e., a single-family dwelling unit) or a subunit within a structure (i.e., an apartment in an apartment building or complex).[8] Whenever a line is selected that is a complete structure, all dwelling units within that structure are included in our sample, as are any dwelling units between[9] the selected structure and the next structure listed in the same block.[10]

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[8] Even if a listing contains a within-structure description (e.g., 304 Main, 2nd Floor), it is considered a structure listing if there is no other listing that refers to that structure.

[9] If structures have numbered street addresses, "between" is defined in terms of these address numbers. In areas where

If a selected line is a complete structure, our instructions to the interviewer are as follows:

(selected line description)
Message 1: Check for missed DUs at the address above.
Check for missed DUs between street address above and street address below.
(next listed line description)

For each listing that identifies a subunit within a structure, there must be at least one other listing within the same structure.[11] Our listings are so ordered that for each structure in which subunits are listed there must be a unique first-subunit and a unique last-subunit listing.

When we select the first subunit in a multiple structure, we include in our sample all dwelling units that exist within the selected subunit, as well as any dwelling units within the structure that are not already listed. When the first subunit of a multiple structure is selected, the following instruction is given to the interviewer:

(selected line description)
Message 2: Check for missed DUs at this apt. number.
Check for DUs at this street address not listed on the (attached) segment printout.

When the selected line is the last subunit listing of a multiple structure, we include in our sample all dwelling units within the selected subunit and all dwelling units between the

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numbers are not used, "between" is defined in terms of location.

[10] The listings within each block are considered circular (i.e., the last listing within a block is followed by the first).

[11] This follows from the definition of a listing as either a complete structure listing or a subunit within structure.

structure in which the subunit is contained and the next listed structure in the block. Here the instruction to the interviewer is:

```
(selected line description)
Message 4:  Check for missed DUs at this apt. number.
            Check for missed DUs between this street address
            and the street address below.
(next listed line description)
```

If the selected line is a non-first/non-last subunit listing, we include in the sample only dwellings within the selected subunit. In this case, the following instruction is used:

```
(selected line description)
Message 3:  Check for missed DUs at this apt. only.
```

<u>Procedures to ensure coverage of the non-DU population (college dorms and other group quarters)</u>. Since the initial cohort definitions include civilian youth aged 14 to 21 living in all noninstitutional settings, special procedures were used to ensure appropriate sample coverage in living units not classified as dwellings. These non-DU living units include college dormitories and other group quarters.

In past surveys of the noninstitutional adult population, NORC has used a <u>single</u> procedure to obtain sample coverage of the non-DU noninstitutional civilian population. Because of the restricted age distribution in the proposed survey, NORC made use of two procedures. One of these procedures was used to cover the noncollege portion of this nonDU population; another procedure was used for college students.

<u>Procedures for the inclusion of noncollege "group quarters."</u> The inclusion of the noncollege, noninstitutional non-DU

population aged 14 to 21 was accomplished by the following two-stage procedure. The first stage was carried out prior to the beginning of field interviewing. Each segment in use for the survey was field enumerated for all group quarters structures, except college dormitories. Within these group quarters structures, a complete listing of individual quarters (IQs: beds and/or rooms with beds) was undertaken. The listing of IQs was then subsampled using the same final-stage selection procedure applied to dwelling units within the segment.

The second stage in the NORC group quarters sampling procedure was carried out at the time of screening in conjunction with the standard NORC missed dwelling unit precedure. All group quarters except college dorms that were not explicitly listed in the first step of the individual quarters procedure were eligible for selection at this stage. These non-first-stage group quarters were implicitly linked to listed dwelling units by the same linking rules applicable to nonlisted dwelling units. For each selected dwelling unit, a check was made for implicitly linked but unlisted dwelling units as well as for implicitly linked but unlisted individual quarters units. As is the case with our missed dwelling unit procedure, the instructions for the missed individual quarters procedure were computer-generated for each selected dwelling unit. The interviewer was provided with specific instructions indicating the appropriate DU/IQ checks that must be carried out at each selected dwelling unit.

Special procedures for college students. As of October 1976, approximately one-third of the civilian population between the ages of 18 and 21 was enrolled in college (U.S. Bureau of the Census, 1978). In many household surveys the coverage of the college population is haphazard and ill-defined. Given the nature of the proposed research, special procedures were used to ensure complete coverage of this portion of the youth cohort.

Through a set of explicit rules, every full- or part-time college student was "linked" to a unique living unit that had a known probability of entering the sample. These rules "link" college students who live in a non-DU setting (dorms) away from their parents' homes for parts of the year to their parents' home. This alternative was chosen for both sampling and operational reasons. From a sampling standpoint, linkage of college students living in non-DU settings to parents' DUs will tend to minimize the occurrence of small area "pockets" of inscope population and the resulting large variability in cluster size. From the standpoint of field operations, the parents' home represents a contact location of relative stability. This will be most crucial in the yearly follow-up efforts.

The specific linkage rules are as follows:

- College students who live in a specified dwelling unit on a year-round basis are linked to that dwelling unit.
- College students who do not live in dwelling units on a year-round basis are linked to their parents' or guardians' DUs.
- In situations where the application of this condition results in multiple linkages (e.g., divorced or separated parents living in two separate DUs), a unique linkage is established on the basis of maximum financial support.

Should this condition not provide a unique linkage, the following priority scheme is used:

- Living natural or adoptive mother
- Living natural or adoptive father
- Living female guardian
- Living male guardian

Should these rules provide no linked DUs, a student was linked to his or her non-year-round place of residence.

In order to implement this procedure, we collected potential linkage information at all sample DUs and GQs (i.e., we asked parents about children that are away at school). In most situations, unmarried college students in the 14 through 21 cohort were linked to their parents' DUs; married couples or cohabiting couples living in DUs on a year-round basis were linked to their own DUs, married couples or cohabiting couples not living in a DU on a year-round basis were linked to their respective parents' DUs.

Sample of Youth Cohort in Active Military Service

As of September 30, 1978, there were 657,549 members of the active armed forces who would be between the ages of 17 and 21 as of January 1, 1979. Individuals in this group were sampled by a stratified two-stage selection procedure. The sample design for this portion of the youth cohort was developed in cooperation with the Department of Defense (DOD), the Defense Manpower Data Center (DMDC), the Rand Corporation DOD Survey Group, the NLS staff and NORC. Actual selection of sample individuals was carried out jointly by DOD, Defense Manpower Data Center and NORC.

The basic sample design called for the selection of a sample of approximately 1,300 members of the active armed forces. In order to provide samples of sufficient size for separate estimates with respect to sex, it was decided to sample females at a rate approximately six times that used for males. This would produce approximately 850 males and approximately 450 females. Within each group, all individuals were to be sampled with equal probability. Within each sex, the sample was stratified on the basis of branch of service and geographic location. Proportionate allocation was used with respect to these stratification cells. Sample selection was carried out in two stages.

Each of the four armed services (Army, Air Force, Navy and Marine Corps) maintains up-to-date lists of all personnel. Included in these lists is information about age, sex and assignment unit identification code (UIC). It would have been possible to sample individuals from these lists directly in a single stage of sampling (i.e., simple random element sampling); however, because of the face-to-face nature of the interview, it was decided to make use of cluster sampling.

The primary units of sample selection were composed of individuals within the same unit identification code. This unit code typically defines a group of individuals residing at the same physical location. Over all services there were a total of 12,488 UICs containing one or more persons in the 17-21 youth cohort. Because of the differential sampling rates to be applied to males and females, these UICs were first separated into two groups: group 1 consisted of UICs with no females in the 17-21 cohort; group 2 consisted of UICs with at least one female in the 17-21 cohort.

Each of the two groups of UICs was divided into 20 basic strata, defined on the basis of armed service branch and geographic location as follows:

I. ARMED SERVICE BRANCH: (4 branches)
    A. ARMY
    B. NAVY
    C. AIR FORCE
    D. MARINE CORPS
II. GEOGRAPHIC LOCATION (5 categories)
    A. EASTERN UNITED STATES
    B. WESTERN UNITED STATES
    C. EUROPE
    D. FAR EAST
    E. OTHER

Within each of these 20 basic strata UICs were linked together in order to form primary sampling units (PSUs) as follows:

1. UICs in group 1 (males only) were linked in order to form PSUs with a minimum of 20 males
2. UICs in group 2 (at least one female) were linked in order to form PSUs with a minimum of 20 males and 10 females

In the linkage process, attempts were made to minimize the geographic distance among UICs within the same PSU. This linkage process resulted in the formation of 3,711 group 1 and 2,256 group 2 PSUs across the 20 basic strata.

First stage selection of PSUs was carried out within each of the 20 basic design strata separately for males and females. Within each sex the probability of selection for a PSU was proportional to the number of 17-21 youth (of that sex) within the PSU.

Let MOS_{mi} = the number of 17-21 males within the i^{th} PSU

MOS_{fi} = the number of 17-21 females within the i^{th} PSU

For the male sample, the probability of selection for the i^{th} PSU was

$$f_{mi} = \frac{150\ MOS_{mi}}{579{,}508}$$

For the female sample, the probability of selection for the i^{th} PSU was

$$f_{fi} = \frac{110\ MOS_{fi}}{47{,}305}$$

For both the male and female samples the probability of selection for the i^{th} PSU was constrained to an upper limit of unity. Thus, any PSU whose measure of size for males (MOS_{mi}) exceeded 579,508/150 = 3863.38 was selected with certainty. Any PSU whose measure of size for females (MOS_{fi}) exceeded 47,305/110 = 430.05 was selected with certainty.

It should be noted that although separate samples were selected for males and females, a form of the Keyfitz procedure was used in order to maximize the overlap between PSUs selected for the male sample and PSU selected for the female sample.

In total, 146 PSUs were selected for the male sample and 103 PSUs were selected for the female sample. The overlap among these units was 58.

Within-PSU selection was carried out by DMDC. On the basis of specifications provided by NORC, selected PSUs were subsampled at the rates $13.35/MOS_{mi}$ for the male sample and $9.35/MOS_{fi}$ for the female sample. In those instances where stage one PSU selection had been made with certainty (probability = 1), within-PSU selection was carried out with sampling rates 1/289.3922 for male sample PSUs and 1/45.7495 for female sample PSUs. This sampling produced a list of 3,073 persons.

This sample was systematically subsampled at a rate of one in two in order to provide 1,537 names. Prior to subsampling the list produced by DMDC was ordered by PSu in order to ensure that all PSUs would be included in the subsample. Subsequently, an additional subsample of 256 names was selected by systematic selection from the remaining unselected names on the DMDC sample list.

In combination these subsamples produced a uniform subsample rate of 1792.5/3073.

Overall Sampling Rates

The stages of sampling described above produced the following overall sampling rates:

$$f(\text{males}) = \frac{150\ MOS_{mi}}{579{,}508} \times \frac{13.35}{MOS_{mi}} \times \frac{1792.5}{3073} = 1/496.124$$

$$f(\text{females}) = \frac{110\ MOS_{fi}}{47{,}305} \times \frac{9.35}{MOS_{fi}} \times \frac{1792.5}{3073} = 1/78.851$$

II. DESCRIPTION OF WEIGHTING: NONMILITARY

Data weighting for the initial year cohort involved five basic steps. These steps were designed to accomplish the following objectives:

1. Correction for differential probability of selection at the initial stage of household selection.
2. Correction for differential completion rates at the initial "screening phase" of data collection.
3. Correction for differential subsampling rates for Hispanic and black cohort members prior to initial interview. Correction of differential completion rates among all cohort members at the first year interview stage of data collection.
4. Proper combination of cases obtained in the cross-sectional and supplemental samples; across these samples.
5. Adjustment of weighted cohort sizes to conform with outside independent Census estimates projected to January 1, 1979.

Procedures and Steps

1. In the inital step, weights were assigned to each completed case on the basis of the selection probability for the dwelling unit which contained the family unit where the respondent was initially located (i.e., listed). For the i^{th} respondent, this weighting factor was

   $W_{1i} = 1/f_i$, where f_i is the probability of selection for the dwelling unit containing the family unit where the respondent was initially listed in the screening process.

2. In this step, a cluster specific adjustment was introduced in order to compensate for differential

completion rates in the family unit within dwelling unit screening process. There were 1,818 selection clusters in the entire sample (918 in the cross-sectional sample and 900 in the supplemental sample).

For the i^{th} respondent, this adjustment factor was

$$W_{2i} = \frac{\text{Number of family units selected in the cluster containing the } i^{th} \text{ respondent}}{\text{Number of family units in the } i^{th} \text{ respondent's cluster where screening information was obtained}}$$

In those instances where refusals were encountered at the dwelling unit level (i.e., it was impossible to determine whether or not there was more than one family unit within the dwelling unit), the ratio of family units to dwelling units for the remainder of the cluster was used to estimate the number of family units contained within the dwelling unit. W_{2i} was constrained to an upper limit of 1.5.

3. In this step adjustments were made for the additional stage of subsampling applied to blacks and Hispanics screened in the supplemental sample prior to initial interview. In addition, adjustment factors were applied to all selected respondents to compensate for differential response rates in the first interview. These non-response adjustment factors were applied at the PSU level (102 cross-sectional PSUs and 100 supplemental PSUs) for each of the eight basic design cohorts listed below:

    1. Hispanic males

2. Hispanic females
3. Non-Hispanic black males
4. Non-Hispanic black females
5. Economically disadvantaged non-Hispanic non-black males
6. Economically Disadvantaged, Non-Hispanic, Non-black females
7. Other males
8. Other Females

NOTE: All basic design cohorts, except 7 and 8, were sampled in both the cross-sectional and supplemental samples. Thus, the step 3 weight factor for the i^{th} respondent was

$$W_{3i} = A_{3i}/s_i ,$$

where

$$A_{3i} = \frac{\text{Number of assigned cases with respondent i's PSU and design cohort}}{\text{Number of completed cases within respondent i's PSU and design cohort}}$$

and

$$s_i = \text{probability of retention in sample if } i^{th} \text{ respondent was in black or Hispanic design cohort of supplemental sample,}$$
$$= 1, \text{ otherwise}$$

An upper limit of 1.5 was applied to the factor A_{3i}.

4. The purpose of this step was to rescale the weights developed in steps 1, 1 and 3 for cases in design cohorts 1-6 in order to properly combine respondents from the cross-sectional and supplemental samples.

Prior to this step, the supplemental and cross-sectional samples were treated as independent units.

This rescaling was carried out separately for each of the six design cohorts present in both the cross-sectional and supplemental samples.

Within each of the cohorts a preliminary weight was computed for each respondent within the cohort. For the i^{th} respondent within the cohort, this preliminary weight was the product of weights developed at steps 1, 2 and 3. Specifically,

$$W'_{4i} = W_{1i} \times W_{2i} \times W_{3i}$$

Within each of the cohorts separate means and standard deviations were calculated for these preliminary weights from the cross-sectional and supplemental portions of the cohort. Thus within a specified cohort

M_c = mean of weights W'_{4i} from the cross-sectional portion of the cohort

M_s = mean of weights W'_{4i} from the supplemental portion of the cohort

S_c = standard deviation of weights W'_{4i} from the cross-sectional portion of the cohort.

S_s = standard deviation of weights W'_{4i} from the supplemental portion of the cohort

These means and standard deviations were used to determine the weighting efficiency factor for the cross-sectional and supplemental portions of the sample for the cohort as follows:

$$WEF_c = \frac{1}{(1 + (M_s/S_c)^2)} = \text{weighting efficiency factor cross-sectional portion}$$

$$WEF_s = \frac{1}{(1 + (M_s/S_s)^2)} = \text{weighting efficiency factor supplemental portion}$$

These efficiency factors were used in conjunction with the actual number of cases within the cross-sectional and supplemental portions of the cohort to determine the effective sample bases for these portions of the cohort.

Thus,

$ESB_c = n_c \times WEF_c$

$ESB_s = n_s \times WEF_s$

where n_c and n_s are defined as the number of sample cases in the cross-sectional and supplemental portions of the cohort respectively, and ESB_c and ESB_s are defined as the effective sample bases for the cross-sectional and supplemental portions of the cohort respectively.

Adjustment factors were developed for the cross-sectional and supplemental portions of the specified cohort so that the proportion of weighted cases from the cross-sectional and supplemental parts of the cohort would be in the same relationship as the effective sample bases from these two parts of the total cohort. Using the preliminary weights W'_{4i}, the total sum of weights from both portions of the cohort is

$TSW = (n_c \times M_c) + (n_s \times M_s)$

The adjustment factor for the cross-sectional portion of the cohort is

$$A_{4c} = \frac{P_c \times TSW}{n_c \times M_c}, \text{ where } P_c = \frac{ESB_c}{ESB_c + ESB_s}$$

The adjustment factor for the supplemental portion of the cohort is

$$A_{4s} = \frac{P_s \times TSW}{n_s \times M_s}, \text{ where } P_s = \frac{ESB_s}{ESB_c + ESB_s}$$

These adjustment factors were applied to the preliminary step 4 weights W'_{4i} to produce final step 4 weights W_{4i}.

$W_{4i} = A_{4c} \times W'_{4i}$, for i within cross-sectional portion,

$W_{4i} = A_{4s} \times W'_{4i}$, for i within supplemental portion.

Numbers of cases, mean weights and standard deviations of weights are shown in Tables 1A3 and 1A4.

5. In the final step of weighting, the sum of weights from each of 48 poststrata (6 sex-race groups x 8 age groups) was adjusted to estimates of population size derived from U.S. Census Bureau estimates. This was accomplished by application of the adjustment factor A_5, within each of the 48 poststrata as follows:
Within each of the 48 poststrata,

NSP = total population estimate developed as above

NSS = total sum of weights W_{4i} for the cohort

A_5 = NSP/NSS

This factor was applied to each of the final step 4 weights to produce a final respondent weight for 1979.

$W_i = A_5 \times W_{4i}$ (W_i = final weight for i^{th}

TABLE 1A.3

MEAN WEIGHTS AND STANDARD DEVIATIONS AFTER STEPS 1 THROUGH 3 FOR COHORT GROUPS

GROUP	# OF CASES	MEAN WEIGHT (M_c or M_s) (HUNDREDS)	STANDARD DEVIATION OF WEIGHTS (S_c or S_s) (HUNDREDS)
HISPANIC MALES			
CROSS SECTION	216	43.4046	7.6727
SUPPLEMENT	730	12.0197	5.2937
HISPANIC FEMALES			
CROSS SECTION	228	43.4185	7.4719
SUPPLEMENT	751	12.4562	5.3139
NON-HISPANIC BLACK MALES			
CROSS SECTION	347	42.6462	6.5155
SUPPLEMENT	1,097	15.7230	6.9737
NON-HISPANIC BLACK FEMALES			
CROSS SECTION	404	42.3624	7.3335
SUPPLEMENT	1,075	18.4784	5.7822
ECONOMICALLY DISADVANTAGED NON-HISPANIC NONBLACK MALES			
CROSS SECTION	203	40.9998	5.3146
SUPPLEMENT	744	10.2600	5.7963
ECONOMICALLY DISADVANTAGED NON-HISPANIC NONBLACK FEMALES			
CROSS SECTION	198	42.1845	5.8513
SUPPLEMENT	899	10.3569	6.1670
NONDISADVANTAGED NON-HISPANIC NONBLACK MALES			
CROSS SECTION	2,239	42.7289	5.7063
NONDISADVANTAGED NON-HISPANIC NONBLACK FEMALES			
CROSS SECTION	2,277	42.4614	5.6103

TABLE 1A.4

MEAN WEIGHTS AND STANDARD DEVIATIONS AFTER STEPS 1 THROUGH 4 FOR COHORT GROUPS

GROUP	# OF CASES	MEAN WEIGHT (M_c or M_s) (HUNDREDS)	STANDARD DEVIATION OF WEIGHTS (S_c or S_s) (HUNDREDS)
HISPANIC MALES			
CROSS SECTION	216	12.1711	2.1515
SUPPLEMENT	730	10.5125	4.6299
HISPANIC FEMALES			
CROSS SECTION	228	11.8207	2.0342
SUPPLEMENT	751	10.2968	4.3929
NON-HISPANIC BLACK MALES			
CROSS SECTION	347	17.2401	2.6340
SUPPLEMENT	1,097	14.7425	6.5388
NON-HISPANIC BLACK FEMALES			
CROSS SECTION	404	16.3722	2.8343
SUPPLEMENT	1,075	15.3587	4.8060
ECONOMICALLY DISADVANTAGED NON-HISPANIC NONBLACK MALES			
CROSS SECTION	203	10.7190	1.3895
SUPPLEMENT	744	8.2621	4.6676
ECONOMICALLY DISADVANTAGED NON-HISPANIC NONBLACK FEMALES			
CROSS SECTION	198	9.5518	1.3249
SUPPLEMENT	899	7.1872	4.2796
NONDISADVANTAGED NON-HISPANIC NONBLACK MALES			
CROSS SECTION	2,277	42.4614	5.6103
NONDISADVANTAGED NON-HISPANIC NONBLACK FEMALES			
CROSS SECTION	2,239	42.7289	5.7063

TABLE 1A.5

POST-STRATIFICATION POPULATION TARGETS
(THOUSANDS)

	MALES			FEMALES		
BIRTH YEAR	HISPANIC	NON-HISPANIC BLACK	OTHER	HISPANIC	NON-HISPANIC BLACK	OTHER
1957	112.4	241.0	1,635.6	127.0	280.5	1,689.5
1958	112.1	248.0	1,639.4	135.9	287.0	1,697.6
1959	113.4	258.0	1,641.1	136.1	287.0	1,671.4
1960	131.7	282.0	1,680.3	128.4	290.5	1,665.1
1961	137.9	296.5	1,699.6	125.2	293.0	1,645.3
1962	139.5	298.0	1,679.0	123.5	292.5	1,616.0
1963	139.0	300.0	1,659.0	126.4	294.0	1,591.6
1964	144.3	292.0	1,583.2	140.3	288.0	1,515.7

respondent)

As noted above, the 48 poststrata were defined on the basis of the 6 sex-race groups by 8 age groups, as follows:

6 SEX-RACE GROUPS
Males - Hispanic
Males - black non-Hispanic
Males - others
Females - Hispanic
Females - black non-Hispanic
Females - all others
8 AGE GROUPS
Single Birth Years 1957, 1958, ..., 1964

Estimates of poststratum size were derived as follows:

1. Estimates of the civilian population of the U.S. were obtained by sex, single year of age and race (black, other) as of July 1, 1978 from U.S. Bureau of the Census (1979, Table 3).
2. By using the 13 and 21 year cohorts, these population estimates were carried forward 6 months to produce estimates of the 14-17 and 18-21 population by sex as of January 1, 1979.
3. To estimate the number of Hispanics in each of the single year age cohorts, U.S. Bureau of the Census (1979) was used. Similarly, U.S. Bureau of the Census (1979) was used in order to estimate the number of economically disadvantaged non-Hispanics, nonblacks in each of the single year age cohorts.

Post stratification population targets are shown in Table 1A5.

Because screener information on income was not available for approximately 20 percent of the cross-sectional sample, it was not possible to classify all non-Hispanic, nonblack individuals on the basis of poverty status (i.e., economically disadvantaged). In the application of procedures which combined portions of the supplemental sample with portions of the cross-sectional sample (step 4), the cross-sectional portion of the economically disadvantaged cohort was restricted to those individuals with income available from the screening interview who meet the conditions for this classification. The resulting weights for this combined group were rescaled, separately by male and female, so that the weighted sum of known economically disadvantaged individuals among the nonblack non-Hispanic cohort would equal the initially weighted sum (after step 3) of known economically disadvantaged non-Hispanic nonblack males and females in the cross-sectional sample.

Post stratification weighting did not make use of a separate economically disadvantaged classification because of the lack of classification information for a portion of the sample.

III. DESCRIPTION OF WEIGHTING: MILITARY

Data weighting for the initial year in the military cohort involved three basic steps designed to accomplish the following objectives:

1. Correction for differential probability of selection for males and females
2. Correction for differential interview completion rates
3. Adjustment of weighted sample size to conform to known

population size by service, sex, birth year, and race

Procedures and Steps

1. In the initial step, weights were assigned to each case on the basis of selection probability. For the i^{th} respondent, this weighting factor was

   $W_{1i} = 1/f_i$, where f_i is the probability of selection for the i^{th} respondent. For all males, this probability $f_i = 1/496.124$. For females $f_i = 1/78.851$.

2. In the second step a completion rate adjustment factor was calculated on a PSU by sex basis as follows:

   $$W_{2i} = \frac{\text{selected individuals of same sex within } i^{th} \text{ respondent's PSU}}{\text{number of completed cases of same sex within } i^{th} \text{ respondents PSU}}$$

   The factor W_{2i} was constrained to an upper limit of 1.5.

3. For each respondent, a preliminary step 3 weight was calculated by multiplication of the weights from steps 1 and 2

   $$W'_{3i} = W_{1i} \times W_{2i}$$

   These preliminary weights were then summed within 80 (4 service by 2 sex by 5 birth year by 2 race) post strata. In a third step, final adjustment factors were then determined as the ratio of the actual population within the poststratum to the sum of step 3 preliminary weights within the poststratum.

   $$A_{3i} = \frac{\text{population size within } i^{th} \text{ respondent's post-stratum}}{\text{sum of step 3 preliminary weights within } i^{th} \text{ respondent's poststratum}}$$

TABLE 1A.6

MILITARY POST-STRATIFICATION TARGETS

ARMY

	MALE		FEMALE	
BIRTH YEAR	BLACK	OTHER	BLACK	OTHER
1957	21,053	44,131	1,701	4,912
1958	22,261	49,121	1,581	4,648
1959	19,480	45,364	1,504	4,259
1960	8,840	21,832	930	2,223
1961	309	2,027	41	61

NAVY

	MALE		FEMALE	
BIRTH YEAR	BLACK	OTHER	BLACK	OTHER
1957	4,904	45,023	269	2,630
1958	5,130	45,340	244	2,248
1959	4,323	38,502	209	1,874
1960	2,359	21,106	104	833
1961	209	2,785	5	67

MARINE CORPS

	MALE		FEMALE	
BIRTH YEAR	BLACK	OTHER	BLACK	OTHER
1957	4,752	21,735	113	572
1958	4,976	22,855	107	679
1959	4,637	19,038	112	638
1960	2,552	10,389	83	384
1961	179	1,021	5	19

AIR FORCE

	MALE		FEMALE	
BIRTH YEAR	BLACK	OTHER	BLACK	OTHER
1957	4,020	33,120	649	4,742
1958	3,707	30,045	552	4,342
1959	3,059	24,230	452	3,581
1960	1,622	11,528	201	1,516
1961	78	743	11	63

The final weight assigned to the i^{th} respondent was

$$W_i = W_{1i} \times W_{2i} \times A_{3i}$$

It should be noted that population sizes within the 80 post strata were obtained from the actual sampling frame of all persons in the armed forces as of September 30, 1978 who would be between 14 and 21 as of January 1, 1979.[12] Although some information was available which would have allowed the use of a finer level of poststratification based upon ethnicity (Hispanic, non-Hispanic), this finer post-stratification was not implemented. It was felt that the questions used in the ethnicity classification of all "frame" elements were sufficiently different from the ethnicity classification used for sample respondents so as to preclude compatibility.

Table 1A6 shows the population counts for the 80 post strata which were used.

IV. STANDARD ERROR APPROXIMATIONS

NORC has computed explicit standard errors for a number of statistics based upon the entire NLS Youth Sample (Total, Civilian and Military) and 11 sex and/or race subclasses (see Table 1A7).

Standard errors for other statistics (defined over the entire sample or the same subclasses) may be approximated by use of the DEFT factors shown in Table 1A8.

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[12] In those instances where there were no sample cases within a cell, no factor was applied and no collapsing was used.

TABLE 1A.7

DEFT FACTORS[1]

	CIVILIAN		MILITARY		TOTAL	
	PROPORTIONS	MEANS	PROPORTIONS	MEANS	PROPORTIONS	MEANS
ALL YOUTH	1.79472	1.65700	1.32891	1.18853	1.72547	1.71282
MALES	1.55111	1.51606	1.44653	1.01622	1.46605	1.56808
FEMALES	1.60979	1.44894	1.12133	1.00976	1.58029	1.49720
HISPANICS	1.60075	1.44315	1.13513	1.15980	1.44342	1.45699
BLACKS	1.44149	1.40232	1.31345	1.03720	1.35303	1.43730
WHITES	1.62143	1.49627	1.32510	1.20744	1.58686	1.56996
HISPANIC MALES	1.32441	1.22836	1.01244	1.01810	1.24321	1.22329
HISPANIC FEMALES	1.54178	1.24167	1.01152	1.000	1.40353	1.25095
BLACK MALES	1.27884	1.18611	1.11046	1.000	1.19457	1.21378
BLACK FEMALES	1.29725	1.22241	1.01847	1.00392	1.24877	1.25243
WHITE MALES	1.40640	1.38187	1.13528	1.02428	1.33775	1.45962
WHITE FEMALES	1.46954	1.34025	1.13794	1.01491	1.46889	1.37581

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[1] $\text{DEFT} = \sqrt{\text{DEFT}} = \sqrt{\dfrac{\text{Actual Variance}}{\text{SRS Variance}}}$

The statistics used to calculate the DEFT factors are proportion high school dropouts, proportion attending high school, proportion attending college, proportion high school graduates, proportion married, proportion employed, unemployment rate, labor force participation rate, enrollment status, proportion enrolled in government programs, mean years of school completed, mean number of children expected, mean years of education expected to be completed.

Approximate Standard Errors: Percentages

To approximate a standard error of a percentage the following formula is applicable:

$$se(P) = DEFT\sqrt{\frac{P(100-P)}{n}}$$

where:

se(P) = the approximate standard error for the percentage P

P = the sample percentage (ranging from 0 to 100)

n = the actual unweighted sample size for the demographic subclass from which the percentage was developed

DEFT = the appropriate DEFT factor for the particular demographic subclass and sample type from which the percentage was developed

For example, the appropriate DEFT factor for estimating a standard error of the percentage of civilian Hispanic males who were high school dropouts is 1.32241 (see column one, row seven of the table). The calculated sample estimate (P) equals 22.19 percent and the unweighted sample size is 946. Therefore,

$$se(P) = 1.32441 \quad \frac{22.19(100-22.19)}{946}$$

$$1.7893$$

To approximate the standard error of the corresponding projected population total (NP/100), one calculates:

$$se(NP/100) = N\ se(P)/100$$

where

se(NP/100) = the approximate standard error of the projected population total corresponding to a percentage P within a particular demographic subclass and sample type

N = the appropriate projected total population base for the particular demographic subclass and sample type

For example, the projected total population base for civilian Hispanic males is 1,030,861. The projected number of civilian Hispanic male high school dropouts is equal to NP/100 or 1,030,861 · 22.19/100 = 228,748. Thus the approximate standard error for the total number of civilian Hispanic male high school dropouts is

$$se(NP/100) = (1{,}030{,}861)\ (1.7893/100)$$
$$= 18{,}445.1959$$

Approximate Standard Errors: Means

One can compute approximate standard errors for means as follows:

$$se(\overline{X}) = DEFT \sqrt{\frac{S^2}{n}}$$

where

$se(\overline{X})$ = the approximate standard error for the mean

DEFT = the appropriate DEFT factor for the particular demographic subclass and sample type from which the mean was developed

S^2 = the weighted element variance computed for the demographic subclass and sample type from which the mean was developed

n = the unweighted sample size for the particular mean

For example, the DEFT factor for all Hispanics in the military is 1.1598 (see column six, row four of the table). To approximate the standard error of the mean number of years of education completed by this subclass, where the weighted element variance is .72955 and the sample size is 77, one computes

$$\text{se}(X) = 1.1598 \quad \frac{.72955}{77}$$

$$= .1131$$

Chapter 1 References

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Chapter 2

THE EMPLOYMENT STATUS OF YOUTH

by Richard Santos

This chapter presents the labor force participation rates, unemployment rates, and employment/population ratios of the civilian noninstitutionalized population age 16-21. The employment status of youth is estimated using Current Population Survey (CPS) procedures, measured as of the week preceding the interview week.[1] The NLS reported a one-sixth higher labor force participation rate, over one-third higher unemployment rate and an 11 percent higher employment/population ratio for youth age 16-21 than the CPS. These differences in employment status between the two surveys were much greater for youth age 16-17, for black and Hispanic youth, and for those whose major activity during the survey week was school (See Appendix 2A). A major reason for these differences may be that the labor force status of youth in the NLS sample is determined by the response of the youth, whereas the CPS labor force status is usually determined by the response of the parent. The NLS findings suggest that the youth unemployment problem is more widespread than has normally been perceived.

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[1] Only youth age 16-21 are included in this analysis: as in the CPS, younger youth are not considered; they are treated in Appendix 2B. Those interviewed after May 1979 are excluded to control for the large influx of students to the labor force during the summer. These youth are assumed to be distributed proportionately to those who were interviewed prior to the summer.

As expected, however, the NLS survey found that labor force difficulties varied by race, sex, and age, and this chapter notes these differences. The effect of age and school enrollment status on employment status is also examined: both are expected to show a positive influence. Particular attention is given to the school attendance and employment status of high school students and school dropouts. Although school is the major reason many youth do not enter the labor force, some youth are neither in the labor force nor in school: this chapter also explores the characteristics of these youth and their reasons for being out.

I. EMPLOYMENT STATUS OF NLS YOUTH AGE 16-21

All Youth

During the spring of 1979 a total of 17.4 million youth were in the labor force, 14.1 million employed and 3.3 million unemployed. Table 2.1 shows that the overall labor force participation rate (LFPR) was 71 percent, the unemployment rate was 19 percent, and the employment/population ratio was 57 percent. Male youth had higher LFPR and employment/population ratios and lower unemployment rates than females. White youth participated more in the labor force and had higher employment/population ratios and lower unemployment rates than minority youth.

Table 2.1 Employment Status, by Sex and Race

Sex	Labor force participation rate	Percent unemployed	Employment/ population ratio
	Black		
Female	60.1	41.2	35.4
Male	71.0	36.0	45.4
Total	65.3	38.5	40.2
	Hispanic		
Female	53.4	24.7	40.2
Male	70.7	22.0	55.1
Total	61.8	23.2	47.5
	White		
Female	70.0	17.5	57.7
Male	74.9	14.4	64.1
Total	72.4	15.9	60.9
	Total		
Female	67.6	20.7	53.6
Male	74.1	17.6	61.1
Total	70.8	19.1	57.3

UNIVERSE: Civilians age 16-21 on interview date. (N=24,580,000)

Differences by Race and Sex

White males participated slightly more in the labor force than minority males but obtaining employment was a more severe problem for blacks and Hispanics. Of all male youth, blacks had the highest unemployment rate and the lowest employment/population ratio. Over a third of black males in the labor force were unemployed.

Hispanic males did better at finding employment than blacks but not so well as whites.

Females in general had lower LFPR than males but the LFPR difference by sex was greater for minority females, especially Hispanics. Furthermore, black young women had the highest unemployment rate and lowest employment/population ratio of all the race-sex groups. Two-fifths of the black females in the labor force and nearly one-fourth of the Hispanic females were unemployed, compared to less than one-fifth of the white females.

Employment Status and Age

Table 2.2 shows that age appears to improve the employment status of all youth. Increasing age is associated with a higher LFPR, lower unemployment rate, and higher employment/population ratio but the level of improvement varied by race and sex. For example, differences in the LFPR of young black and white males age 16-19 are reduced to parity by age 20-21. However, when employment/population ratios are examined, substantial racial differences remain for the older youth. For males age 16-17, the proportion of youth employed increased with age but blacks and

Table 2.2 Employment Status, by Sex, Race and Age

Sex and age	Labor force participation rate	Percent unemployed	Employment/ population ratio
		Black	
Female			
16-17	48.2	54.6	21.9
18-19	64.0	40.6	38.0
20-21	68.0	32.6	45.8
Male			
16-17	59.6	53.5	27.7
18-19	72.7	33.4	48.4
20-21	82.9	22.8	64.0
		Hispanic	
Female			
16-17	41.9	36.7	26.5
18-19	57.2	22.3	44.5
20-21	60.3	19.1	48.8
Male			
16-17	60.0	37.9	37.3
18-19	76.2	16.0	64.0
20-21	77.7	13.3	67.3
		White	
Female			
16-17	62.4	25.0	46.8
18-19	74.0	17.4	61.1
20-21	73.5	11.2	65.3
Male			
16-17	64.4	23.3	49.4
18-19	77.7	12.8	67.8
20-21	83.0	8.6	75.8
		Total	
Female			
16-17	59.2	28.8	42.2
18-19	71.5	20.5	56.9
20-21	71.9	14.4	61.5
Male			
16-17	63.5	28.1	45.6
18-19	77.0	15.6	64.9
20-21	82.6	10.6	73.9

UNIVERSE: Civilians age 16-21 on interview date. (N=24,580,000)

Hispanics continued to trail whites.

The LFPR of young females generally increases with age but much more slowly for females age 18-21. Differences in LFPR between males and females, however, appear to widen with age. For example, the LFPR of white females age 19 and younger approached those of white males and slightly exceeded those of black males age 16-19 and Hispanic males age 16-17. By age 20-21, however, white females trailed both white and minority males. Irrespective of age, minority females had a lower LFPR than both white females and their male counterparts.

As in the case of LFPR, white females, with the exception of those age 20-21, had an employment/population ratio similar to that of their male counterparts. The employment/population ratio of white females within certain age groups was, however, generally greater than those of black males 19 years and younger and Hispanic males age 17 and younger. In addition, employment/population ratios increased with age for all the female groups but whites were more likely to be employed than blacks or Hispanics. By age 20-21, less than half of the minority females had jobs, compared to nearly two-thirds of the white females.

The lower employment/population ratios among both older minority males and females relative to whites can be partially explained by the relationship between age and incidence of unemployment. Getting older appears to decrease the unemployment rate for all youth, but unemployment continues to be concentrated among minority males and females regardless of age. By age 20-

21, unemployment among males dropped to 9 percent for whites, but remained high for minorities--23 percent for blacks and 13 percent for Hispanics. Age was also associated with lower unemployment rates for females, but both a higher proportion of females ages 20-21 relative to males remained unemployed and a higher proportion of minority females were unemployed relative to white females.

II. EMPLOYMENT STATUS AND SCHOOL ENROLLMENT

Early adulthood generally signals a shift in school and work responsibilities and improvement in employment status. Almost nine out of every ten male high school graduates not currently enrolled in school holds a job (Table 2.3). Many, however, carry on both school and work responsibilities: six out of every ten high school students are in the labor force and less than half of all high school students have jobs. Indeed, a third of the civilian youth labor force age 16-21 is comprised of high school students, but they also account for 45 percent of youth unemployment. Table 2.4 presents the distribution of the youth labor force by school enrollment status. In comparison, the distribution of employment favors, as expected, those youth who complete high school. The employment status of youth by school enrollment status noted in Table 2.3 is presented below.

Nonenrolled High School Graduates

The LFPR for high school graduates not enrolled in college reflected the shift from school to work responsibilities, ranging

Table 2.3 Employment Status, by Educational Status, Race and Sex

Educational status	Labor force participation rate			Percent unemployed			Employment/ population ratio		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
	Black								
High school dropout	45.9	81.6	65.3	68.7	32.6	44.1	14.4	55.5	36.5
High school student	50.9	59.9	55.5	51.1	50.7	50.9	24.9	29.5	27.3
College student	62.9	57.6	60.8	23.9	29.1	25.9	47.8	40.9	45.0
Nonenrolled high school graduate	80.4	90.5	84.7	30.8	22.0	26.8	55.6	70.6	61.9
	Hispanic								
High school dropout	46.0	87.5	65.7	40.5	19.5	27.2	27.4	70.5	47.8
High school student	41.6	56.9	50.0	35.0	34.2	34.5	27.1	37.5	32.7
College student	61.5	57.4	59.6	19.4	12.9	16.6	49.5	50.0	49.7
Nonenrolled high school graduate	75.1	86.6	80.6	6.9	11.8	9.3	69.9	76.4	72.7
	White								
High school dropout	62.2	89.7	76.4	37.9	23.5	29.2	38.6	68.6	54.0
High school student	63.1	65.3	64.2	23.6	20.8	22.1	48.2	51.7	50.0
College student	63.3	58.1	60.6	9.4	8.6	9.0	57.4	53.1	55.2
Nonenrolled high school graduate	83.6	94.8	88.5	11.3	7.0	9.3	74.2	88.2	80.5
	Total								
High school dropout	57.2	37.8	73.0	42.5	24.7	31.5	32.9	66.1	50.0
High school student	59.9	64.0	62.1	27.7	25.6	26.6	43.4	47.6	45.6
College student	63.2	58.0	60.6	11.6	10.5	11.0	55.8	52.0	53.9
Nonenrolled high school graduate	82.8	94.0	87.7	13.2	8.8	11.2	71.8	85.8	77.9

UNIVERSE: Civilians age 16-21 on interview date. (N=24,580,000)

Table 2.4 Distribution of the Youth Labor Force, by School Enrollment Status

Educational status	Employed	Unemployed	Total
High school dropout	12	24	15
High school student	29	45	33
College student	19	10	17
Nonenrolled high school graduate	40	21	36
Total percent	100	100	100

UNIVERSE: Civilians age 16-21 in the labor force (N=17,400,000) from a high of 95 percent for white males to a low of 76 percent for Hispanic females. Black females had the lowest employment/population ratio--56 percent--reported for any of the groups under study. Among the male groups, blacks had the lowest employment/population ratio, which was also lower than the ratio of white females.

The lower proportion of employed black males and females relative to whites that are nonenrolled high school graduates can be explained by the relationship between a high school degree and the incidence of unemployment. A high school degree reduces the incidence of unemployment for all youth, but black high school graduates still suffer relatively high unemployment: nearly a third of the black females and a fifth of black males who are nonenrolled high school graduates in the labor force cannot find jobs.

College Students

Female college students participated more in the labor force than males--63 percent versus 58 percent. The LFPR did not vary for college students by race but the employment/population ratios did. Minority college students generally had lower employment/population ratios and higher unemployment rates than comparable whites.

High School Students

Sixty-four percent of white high school students participated in the labor force, more than any other racial group. Black and Hispanic female students were the least likely to be in the labor force and had the most difficulty obtaining employment. For example, half of the white high school students had jobs, compared to about a quarter of both black and Hispanic females. As one would expect, unemployment was pervasive for all high school students, but especially for minority students. Among white students, one in five was unemployed but half of the black high school students in the labor force were unemployed. Among Hispanics, slightly more than one in every three students was unable to find a job.

High School Dropouts

Among males, most high school dropouts were in the labor force, but blacks less so than whites or Hispanics. Nearly seven out of every ten white and Hispanic males were employed in comparison to only half of the black dropouts. Female dropouts participated much less in the labor force than males, and they also had lower employment/population ratios and experienced more unemployment. The employment situation was especially dismal for black and Hispanic female dropouts. Minority females participated less in the labor force and were more likely to experience difficulties in finding work. Among female dropouts, over a third of the whites and a quarter of the Hispanics had jobs, compared to only 14 percent of the blacks. Indeed, the black female dropout unemployment rate approached 69 percent.

High School Dropouts, Age, and Employment Status

Because the age distribution of high school dropouts is not uniform, their employment status is compared with high school students if they are under 18, and the status of dropouts age 18-21 compared to that of nonenrolled high school graduates (Table 2.5). As one would expect, young male high school dropouts age 16-19 have higher LFPR and employment/population ratios than youth in high school. White male dropouts age 16-19 show more unemployment than comparable high school students, but minority dropouts have less unemployment than those in school.

With the exception of Hispanics age 18-19, male high school graduates generally have higher LFPR and employment/population ratios and lower unemployment rates than dropouts of comparable ages. Black and Hispanic males who graduated from high school face less unemployment than those who drop out, but unemployment is still a major problem for minority graduates.

Both white and black female students have similar or higher LFPR and employment/population ratios than black dropouts. In contrast, Hispanic female dropouts have higher LFPR and, with the exception of dropouts age 18-19, higher employment/population ratios than Hispanic female students. Unemployment remains a problem for younger females regardless of school enrollment status, but it is especially prevalent among dropouts. With the exception of black female high school students age 16-17, female dropouts experience more unemployment than high school students.

Female dropouts age 18-21 have substantially lower LFPR and employment/population ratios than do high school graduates not

Table 2.5 Employment Status Comparison of High School Dropouts with High School Students and Nonenrolled High School Graduates by Age, Sex and Race

Educational status and age	Labor force participation rate			Percent unemployed			Employment/population ratio		
	Black	Hispanic	White	Black	Hispanic	White	Black	Hispanic	White
	Female								
High school dropout									
16-17	38.8	54.0	62.2	47.6	38.7	39.9	20.3	33.1	37.4
18-19	48.8	53.0	63.0	75.4	37.9	40.7	12.0	32.9	37.4
20-21	45.1	34.4	60.7	67.2	45.1	32.1	14.8	18.9	41.2
High school student									
16-17	48.9	40.1	62.5	56.0	36.7	23.8	21.5	25.4	47.4
18-19	59.1	46.0	69.3	36.7	26.3	22.6	37.4	33.9	53.6
Nonenrolled high school graduate									
18-19	83.4	71.2	88.8	38.5	2.3	13.3	51.3	69.6	77.0
20-21	79.8	78.3	80.9	26.7	9.7	9.7	58.5	70.7	73.1
	Male								
High school dropout									
16-17	74.6	82.1	79.9	48.0	29.5	27.9	38.8	57.9	57.6
18-19	77.6	87.8	91.5	32.7	15.2	23.7	52.2	74.4	69.8
20-21	89.2	88.8	94.0	25.4	18.1	20.2	66.5	72.8	75.0
High school student									
16-17	57.7	55.3	63.0	54.3	40.3	23.0	26.4	33.0	48.5
18-19	65.5	61.7	74.2	42.6	16.6	13.4	37.6	51.5	64.2
Nonenrolled high school graduate									
18-19	86.0	83.9	95.0	25.3	13.6	8.0	64.2	72.5	87.4
20-21	93.7	90.0	95.1	20.1	11.0	6.4	74.9	80.1	89.0

UNIVERSE: Civilian youth, age 16-21, on interview date, excluding college enrolled youth. (N=19,500,000) currently enrolled in school. Older female dropouts also experience substantially higher unemployment than high school graduates. A high school degree, however, appears to improve the employment status of both white and Hispanic females more than it does that of blacks. For example, well over half of the older black dropouts in the labor force are unemployed. Among black female graduates, unemployment is still high, affecting one-third of youth age 18-19 and a quarter of those age 20-21.

III. OUT OF THE LABOR FORCE (OLF) YOUTH

A total of 7.2 million youth age 16-21 were estimated to be out of the labor force (OLF) during the spring of 1979. Three out of every ten youth in this age group was neither employed nor actively seeking work. Table 2.6 presents selected characteristics of OLF youth by school enrollment status. Nearly half of the OLF youth were currently enrolled in high school and an additional one-fourth were attending college. One in every four OLF youth is thus neither attending school, employed, nor looking for work. In comparison to whites, blacks and Hispanics had a higher proportion of OLF youth who were not attending school.

Table 2.7 compares the characteristics of OLF youth controlling for in-school and out-of-school youth. Out-of-school youth are predominantly female, older, more likely to be school dropouts or married, and plagued more often by a health limitation. Out-of-school OLF females were also more likely to have had a child; half of the whites have had children and the

Table 2.6 Youth Out of the Labor Force by School Enrollment Status and Race

Enrollment status	Black	Hispanic	White	Total
High school dropout	19	26	10	13
High school student	53	48	47	48
College student	17	15	30	27
Nonenrolled high school graduate	11	11	13	12

UNIVERSE: Civilians age 16-21, out of the labor force on interview date. (N=7,200,000)

Table 2.7 Characteristics of Youth Out of the Labor Force, by Race and School Enrollment

Characteristic	Black		Hispanic		White		Total	
	In school	Out school	In school	Out school	In school	Out school	In school	Out school
Sex								
Female	54	73	53	78	48	79	51	78
Male	46	28	47	22	52	21	49	22
Age								
16-17	59	15	62	13	53	15	55	15
18-19	27	42	24	40	28	34	28	36
20-21	14	43	15	47	18	51	17	49
School enrollment status								
High school dropout	--	64	--	71	--	44	--	51
High school student	76	--	77	--	74	--	65	--
College student	24	*	25	--	39	1	35	1
Nonenrolled high school graduate	--	36	--	29	--	55	--	49
Marital status								
Never married	99	82	99	51	98	46	98	53
Married	*	13	1	43	2	47	2	40
Widowed, divorced, separated	1	5	--	6	*	7	*	7
Health limitation								
No	93	84	96	88	94	76	94	79
Yes	7	16	5	12	6	24	6	22
Ever had child (females)								
No	91	38	97	41	98	49	97	46
Yes	9	62	3	59	2	51	3	54

*Percentage is between 0.1 and 0.5.

UNIVERSE: Civilians age 16-21 out of the labor force on interview date. (N=7,200,000) proportion was greater for blacks and Hispanics.

Reasons for Being OLF

OLF youth were asked for the reasons they either did not look for work or want work. While OLF youth could give multiple reasons, nearly 82 percent gave only one reason. As one would expect, schooling emerged as the predominant reason for being OLF among the in-school youth (Table 2.8). Reasons for being OLF for out-of-school youth were, however, more varied (Table 2.9).

Among out-of-school males, no clear reasons emerged for their being OLF. In fact, the "other reasons" category, which included such responses as lacking work permits or social security numbers, being on vacation, having language problems, or moving soon, was commonly used by out-of-school males to explain their being OLF; half of both blacks and whites and a third of Hispanics chose this response category. Furthermore, even though the OLF males were not currently enrolled in school, the second most cited reason was that school or other training responsibilities prevented them from entering the labor force. Two possible explanations may account for this response by out-of-school OLF males: they may intend to return to school and thus are staying out of the labor force, or they are currently enrolled in training programs such as CETA.

For out-of-school females, reasons for being OLF were more clear. Over half of the OLF Hispanic females and two-fifths of the black and white females cited lack of child care and other family responsibilities. Pregnancy was also given as a reason

Table 2.8 Reasons OLF Youth in School Not Seeking or Wanting Work, by Race and Sex

(Percentage distributions)

Reason	Black		Hispanic		White	
	Female	Male	Female	Male	Female	Male
Believed no work available or could not find work	5	4	2	6	3	3
Personal limitations (e.g., too young, no training, handicap)	2	2	4	4	2	2
Can't arrange child care	2	--	2	--	*	--
Family responsibilities	2	--	4	2	2	*
In school or other training	80	76	87	77	83	78
Health	1	2	1	1	1	2
Pregnancy	2	--	1	--	--	--
Spouse or parent opposed	2	1	3	3	1	1
Does not want to work	2	7	1	6	11	12
Can't arrange transportation	9	4	7	6	6	4
Other	14	16	12	14	11	19
Total percent	100	100	100	100	100	100

*Percentage is between 0.1 and 0.5.

UNIVERSE: Civilians age 16-21 out of the labor force and enrolled in school on interview date. (N=4,000,000)

Table 2.9 Reasons OLF Youth Out of School Not Seeking or Wanting Work, by Race and Sex

(Percentage distributions)

Reason	Black		Hispanic		White	
	Female	Male	Female	Male	Female	Male
Believed no work available or could not find work	11	16	5	4	*	16
Personal limitations (e.g., too young, no training, handicap)	4	3	10	9	4	6
Can't arrange child care	27	--	35	--	11	--
Family responsibilities	16	--	20	--	32	--
In school or other training	13	21	5	38	7	25
Health	3	4	1	5	4	9
Pregnancy	18	--	15	--	18	--
Spouse or parent opposed	3	--	5	--	6	--
Does not want to work	8	5	4	27	20	12
Can't arrange transportation	10	11	7	3	11	11
Other	15	57	20	33	11	51
Total percent	100	100	100	100	100	100

*Percentage somewhere between 0.1 and 0.5.

UNIVERSE: Civilians age 16-21 out of the labor force and enrolled in school on interview date. (N=3,170,000) for being OLF by 18 percent of both blacks and whites and 15 percent of the Hispanics. About 8 out of every 10 out-of-school OLF youth are female.

IV. SUMMARY OF MAJOR FINDINGS

The NLS Survey found more extensive labor force involvement among American youth than the Current Population Survey. Not surprisingly, since young workers generally lack skills and experience, they encounter difficulties in the labor market. They are not, however, a homogeneous group who all have similar problems. An examination of youth employment status reveals considerable variation in labor force participation rates, unemployment rates, and employment/population ratios by race, sex, and age.

The unemployment rate was highest among the youngest age group, 16-17, and the unemployment burden of the youngest age group was compounded for minorities. Moreover, their difficult employment situation did not completely ameliorate with age. For example, for all racial groups the rate of unemployment declined as youth approach adulthood, but minority adults considered separately continued to show high unemployment rates. It thus appears that the employment difficulties of youth will not be solved by the mere passage of time.

The NLS Survey also showed that youth appear to be embracing both school and work responsibilties. Six out of every ten youth in high school were also in the labor force and nearly half of all high school students held jobs. Once again, black and

Hispanic high school students lag whites in obtaining employment. As one would expect, a high school degree improves the employment status of all youth but minority graduates continue to face relatively high unemployment. Further research is needed to determine the influence of factors such as discrimination, quality of education, job search pattern, and neighborhood segregation on the high level of unemployment for minority graduates, especially black females.

Three out of every ten youth age 16-21 were, however, neither employed nor looking for work; most of these were in school but one in every four OLF youth was not currently enrolled in school. Most OLF out-of-school youth were female, and family responsibilities, lack of child care, and pregnancy emerged as their predominant reasons for being OLF. Out-of-school males did not produce any clear pattern of reasons for being OLF.

Appendix 2A

EMPLOYMENT STATUS OF YOUTH AGE 16-21: A COMPARISON OF THE NATIONAL LONGITUDINAL SURVEY AND THE CURRENT POPULATION SURVEY[1]

The National Longitudinal Survey (NLS) estimated the employment status of youth using Current Population Survey (CPS) procedures; they apply to the week preceding the interview week.[2] The CPS reference month selected to compare with the NLS youth sample is March 1979, the modal month for interviewing NLS youth, when approximately 44 percent of the NLS youth sample (summer months excluded) was interviewed.[3] Overall, the NLS obtained higher estimates of labor force size for civilian non-institutionalized youth age 16-21 than the CPS. In March 1979, the CPS estimated a total of 14.7 million youth in the civilian labor force: 12.6 million employed and 2.1 million unemployed. The NLS, however, estimated a total labor force size of 17.4 million youth; 14.1 million employed and 3.3 million unemployed.

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[1] A version of this paper was presented by Richard Santos, "Measuring the Employment Status of Youth: A Comparison of the Current Population Survey and the National Longitudinal Survey." Proceedings of the Industrial Relations Research Association Annual meeting, Denver, Colorado, September 5-7, 1980.

[2] Only youth between the ages of 16 and 21 years are included in this analysis: as in the CPS, younger youth are not considered. Those interviewed after May 1979 are excluded to control for the large influx of students to the labor force during the summer. These youth are assumed to be distributed proportionately to those who were interviewed prior to the summer.

[3] The overall seasonally unadjusted CPS unemployment rate declined for civilians age 16-21 during January to May, 1979, 15.0 percent for both January and February, 14.1 percent for March, and 13.0 percent for both April and May.

Besides higher labor force participation, the NLS youth sample yielded higher employment/population ratios and unemployment rates than the CPS. Differences between the two surveys tend to be associated with race, sex and age (Table 2A.1).[4] In addition, the survey differences are greater for youth whose major activity was school during the survey week.

Survey Differences by Race and Sex

The NLS survey showed an overall LFPR of 71 percent, one-sixth higher than the 60 percent rate found by the CPS. Differences in LFPR between the two surveys were greater for blacks than for whites. Black males and females in the NLS survey had an LFPR 19 and 20 points higher, respectively, than the CPS rate, but the difference among whites was 9 points for males and 10 points for females.

The NLS youth survey reported an unemployment rate of 19 percent, substantially higher than the 14 percent reported by the CPS. For males, the NLS survey was 15 percent higher than the

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[4] In order to compare youth in the NLS sample and the CPS survey, the white and other race cohort and the Hispanic cohort in the NLS sample are combined to yield a white race group, since in the CPS, the white race group includes Hispanics. Differences between the two "white" groups still exist, however, since about 4 percent of the Hispanics in the CPS are classified as black but the NLS white group includes other races who in the CPS are combined with blacks. the results of these differences should be to understate slightly the LFPR and employment/unemployment ratios for the NLS white group and to overstate its unemployment rate relative to the CPS. The opposite will occur for blacks where the only difference between the CPS and NLS group is that the NLS excludes other races and Hispanic blacks. The other races category comprises only about 2 percent of the whites and 11 percent of the blacks, so the NLS and CPS should be quite comparable.

Table 2A.1 Employment Status, by Sex, Race, and Age: Comparison of NLS and CPS[a]

Sex and age	Labor force participation rate			Percent unemployed			Employment/ population ratio		
	NLS	CPS	Difference	NLS	CPS	Difference	NLS	CPS	Difference
	Black[b]								
Female	60.2	40.4	19.8	41.2	27.3	13.9	35.4	29.4	6.0
16-17	48.2	23.0	25.2	54.6	37.1	17.5	21.9	14.5	7.4
18-19	64.0	41.8	22.2	40.6	26.0	14.6	38.0	30.9	7.1
20-21	68.0	56.8	11.2	32.6	24.2	8.4	45.8	43.1	2.7
Male	70.9	52.0	18.9	35.9	28.7	7.2	45.4	37.1	8.3
16-17	59.6	29.1	30.5	53.5	43.5	10.0	27.7	16.5	11.2
18-19	72.7	56.1	16.6	33.4	27.0	6.4	48.4	40.9	7.5
20-21	82.9	75.8	7.1	22.8	23.2	-0.4	64.0	58.2	5.8
	White[c]								
Female	68.8	59.0	9.8	17.9	11.5	6.4	56.5	52.2	4.3
16-17	61.0	45.9	15.1	25.6	16.2	9.4	45.4	38.4	7.0
18-19	72.8	62.6	10.2	17.7	11.4	6.3	59.9	55.5	4.4
20-21	72.6	68.0	4.6	11.7	8.5	3.2	64.1	62.3	1.8
Male	74.6	65.9	8.7	14.9	13.0	1.9	63.5	57.3	6.2
16-17	64.1	50.3	13.8	24.3	19.6	4.7	48.5	40.4	8.1
18-19	77.6	70.2	7.4	13.0	12.6	0.4	67.5	61.3	6.2
20-21	82.6	77.8	4.8	8.9	8.9	0.0	75.2	70.9	4.3
	Total								
Total	70.8	59.9	10.9	19.1	14.1	5.0	57.3	51.5	5.8
Female	67.6	56.1	11.5	20.7	13.3	7.4	53.6	48.6	5.0
Male	74.1	63.9	10.2	17.5	14.8	2.7	61.1	54.4	6.7

[a] CPS figures are for March 1979.

[b] NLS excludes other races in Black category. CPS includes other races in Black category.

[c] NLS includes all Hispanics and other races in White category. CPS includes white Hispanics but not other races in White category.

UNIVERSE: Civilians age 16-21 on interview date. (N=24,571,000)

CPS for whites and one-fourth higher for blacks. The NLS unemployment rate was 51 and 56 percent higher for black and white females, respectively.

Less variation was found between the surveys in the employment/population ratio, but the NLS rate was still 6 points (11 percent) higher. Both white males and black females reflected this difference, but the differential increased for black males and decreased for white females; the NLS employment/population ratio was about one-fifth higher than the CPS.

Survey Differences by Age

Differences between the NLS and CPS reports of employment status were greatest among the youngest age group and declined substantially for the older age groups. LFPR differences between surveys narrowed for older youth. For example, the NLS unemployment rate was more than one-fifth higher than the CPS rate among white and black males age 16-17 and black males age 18-19, but the rates are nearly identical for both black and white males age 20-21 and white males age 18-19. For females, differences in the unemployment rates between the two surveys also narrowed for the older age group, but the NLS rates were still substantially higher than the CPS.

Survey Differences by Major Activity

Employment status differences between the two surveys were greatest for youth whose major activity was school. Youth were divided into those who stated that their main activity during the survey week was going to school and all other individuals. For youth whose major activity was school the NLS revealed a 16 point higher LFPR than the CPS (Table 2A.2). The difference was greater for blacks, 28 points as compared to 13 points for whites. For youth engaged in all other activities, the LFPR difference between the two surveys was substantially less, especially for the white group.

The NLS unemployment rates were also greater than the CPS among youth who were mainly engaged in school activities, 54 percent higher as opposed to 17 percent higher for those mainly engaged in other activities. For males engaged in all other activities, the unemployment rates were identical in the NLS and CPS surveys. The NLS showed a 36 percent higher unemployment rate than the CPS for females whose major activity was not school.

For youth engaged in school activity the employment/population ratios were also higher in the NLS than the CPS. The NLS and CPS employment/population ratios were quite similar for youth engaged in all other activities, with the exception of a three point difference among black females.

CPS and NLS Hispanic Teenage Comparison: Youth 16-19 Years

Recently, the CPS has published labor force data on Hispanics on a quarterly basis. The CPS employment status data

Table 2A.2 Employment Status, by Major Activity, Sex and Race: Comparison of NLS and CPS[a]

Sex and major activity	Labor force participation rate			Unemployment rate			Employment/ population ratio		
	NLS	CPS	Difference	NLS	CPS	Difference	NLS	CPS	Difference
				Black					
Total									
School	50.0	22.1	27.9	55.3	36.9	18.4	22.4	13.9	8.5
All other	78.9	70.5	8.4	29.2	25.2	4.0	55.9	52.8	3.1
Male									
School	52.6	24.1	28.5	55.7	42.8	12.9	23.3	13.8	9.5
All other	87.5	83.6	3.9	25.2	24.1	1.1	65.4	63.4	2.0
Female									
School	47.4	20.0	27.4	54.7	29.9	24.8	21.5	14.0	7.5
All other	71.2	59.7	11.5	33.5	26.4	7.1	47.3	44.0	3.3
				White					
Total									
School	53.5	40.1	13.4	25.3	17.2	8.1	40.0	33.2	6.8
All other	85.7	83.3	2.4	12.0	10.0	2.0	75.4	74.9	0.5
Male									
School	53.1	40.3	12.8	23.8	18.5	5.3	40.5	32.9	7.6
All other	92.7	91.3	1.4	10.5	10.6	-0.1	82.9	81.7	1.2
Female									
School	53.9	39.8	14.1	26.9	15.8	11.1	39.4	33.5	5.9
All other	79.4	75.8	3.6	13.5	9.5	4.0	68.7	68.7	0.0
				Total					
Total									
School	53.1	37.2	15.9	29.3	19.0	10.3	37.5	30.2	7.3
All other	84.8	81.4	3.4	14.0	12.0	2.0	72.9	71.7	1.2
Male									
School	53.1	37.8	15.3	28.0	20.9	7.1	38.2	29.9	8.3
All other	92.0	90.3	1.7	12.3	12.3	0.0	80.7	79.2	1.5
Female									
School	52.9	36.6	16.3	30.7	17.0	13.7	36.7	30.4	6.3
All other	78.3	73.4	4.9	15.8	11.6	4.2	65.9	64.9	1.0

are available for youth age 16-19 but not for youth age 16-21.[5] Table 2A.3 shows that the NLS obtained higher levels of LFPR, employment/population ratios, and unemployment than the CPS for Hispanic teenagers. The LFPR obtained for Hispanics in the NLS was 12 points higher than in the CPS and the employment/population ratio was 5 points higher. Unemployment was 42 percent higher than the CPS, but the relative difference declined for older Hispanic teenagers.

Reasons for CPS/NLS Differences

The NLS may have obtained different measures of youth employment status for several reasons.[6] First, the labor force status of youth in the NLS sample is based on the response of the youth, whereas in the CPS, labor force status is usually based on the response of the parent or other responsible adult household member. The labor market activities of youth and their willingness to accept a job may not be perceived identically by young people and their parents. Other possible reasons for the

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[5] Unemployment data on Hispanics are published by sex and separately for teenagers 16-17 and 18-19 years of age. LFPR and employment/population ratio are available for Hispanics age 16-19 but not by sex or age.

[6] Differences between the surveys are well noted in Michael E. Borus, Frank L. Mott, and Gilbert Nestel, "Counting Youth: Comparison of Labor Force Statistics in the CPS and NLS," Report on Youth Unemployment: Its Measurement and Meaning. U.S. Department of Labor, Washington: USGPO, 1978; and Norman Bowers, "Youth Labor Force Activities: Evaluation of Difference Across Surveys," U.S. Department of Labor, Office of Current Employment Analysis, unpublished paper, October 5, 1979; and R.B. Freeman and J.D. Medoff, "Why does the Rate of Youth Labor Force Activity Differ Across Surveys?" National Bureau of Economic Research, May 1979.

Table 2A.3 Employment Status of Hispanic Youth, by Sex and Age: Comparison of NLS and CPS[a]

Sex and age	Labor force participation rate			Percent unemployed			Employment/ population ratio		
	NLS	CPS	Difference	NLS	CPS	Difference	NLS	CPS	Difference
Total	58.8	47.1	11.7	27.1	19.1	8.0	42.9	38.1	4.8
Female	49.9			28.1	21.0	7.1	35.9		
16-17	41.9			36.7	29.3	7.4	26.5		
18-19	57.2			22.3	16.6	5.7	44.5		
Male	67.6			26.3	17.7	8.6	49.8		
16-17	60.0			37.9	26.5	11.4	37.3		
18-19	76.2			16.0	12.5	3.5	64.0		

[a] CPS figures are for the first quarter of 1979.

UNIVERSE: Hispanic civilians ages 16-19 on interview date. (N=1,027,000) difference in the two surveys are the following:

Reference Period. The CPS data refer to the week which includes the 12th of the month. In contrast, the 1979 NLS youth data refer to the week prior to the one in which the interview was conducted. The employment status of NLS youth covers the period from January to May 1979.

Interviewer Bias. The CPS uses experienced Census interviewers and in previous surveys the NLS has also employed Census interviewers. However, the 1979 NLS survey relied on interviewers from the National Opinion Research Center (NORC). While it is unlikely that an interviewer bias or errors contributed to the variance in the surveys, the effects of interviewer differences are not known.

Sponsor Differences. While the CPS and NLS used the same procedure to classify employment status, the design and purpose of the surveys vary. For example, interviewers in the NLS state the study is under the auspices of the U.S. Department of Labor and sponsored by the Comprehensive Employment and Training Act, but the CPS interviewers identify themselves only as Census personnel. Consequently, the stated objectives of the NLS may prime the respondent and thus elicit more employment-related responses.

Further Research. All these hypotheses may partially explain the variance between the two surveys but the most plausible differences appear to be that the NLS directly interviews the youth, while the CPS relies on the head of the household or some other responsible adult. Support for this finding is evident when one notes that the largest differentials occurred among the younger youths and those in school. It is this younger group whose parents may know the least about their job search activities, desire to participate in the labor force or marginal employment. Further research on the reasons for the survey differences will provide more insight into this question as additional work on the NLS youth sample is completed.

Appendix 2B

THE VERY YOUNG IN THE LABOR MARKET: THE CASE OF 14-15 YEAR OLDS

I. INTRODUCTION

In 1961 the President's Committee to Appraise Employment and Unemployment Statistics undertook a major study of labor force concepts and definitions. This committee, known as the Gordon Committee, had a major impact on defining the nation's labor force and developing employment and unemployment concepts. One of the committee's recommendations was to exclude 14-15 year olds from employment and unemployment statistics. The committee considered it unrealistic to include the very young in the labor force because of school attendance requirements and their low participation in the work force. In reviewing the recommendations made by the Gordon Committee, the Bureau of Labor Statistics (BLS) and the Bureau of the Census decided in 1967 that youth age 14-15 were to be excluded from the total labor force but their employment status would still be published separately.[1]

In essence, the exclusion of teenagers age 14-15 from the total labor force meant that scant attention would be given to the employment status of the very young. Indeed, most labor market research has not paid particular attention to the role of 14-15 year olds. The rationale for overlooking their labor market activities is understandable. Most, if not all, are still in school because most states require mandatory attendance until the age of 16 years.

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[1] For an excellent historical development of labor force concepts refer to National Commission on Employment and Unemployment Statistics, Counting the Labor Force (Washington, D.C.: USGPO, 1979).

The 1979 NLS, however, collects data on youth age 14-21 and these data can be analyzed to ascertain the roles that the very young play in the labor market. This paper will present a preliminary profile of 14-15 year olds in the labor market using the 1979 NLS youth survey; examine the type of jobs held by the very young and the extent of unemployment among those searching for work; compare the employment status of 14-15 year olds in the 1979 NLS survey with those obtained from previous NLS surveys in 1966 and 1968; and discuss the major implications arising from having the very young in the labor market.

II. GENERAL CHARACTERISTICS OF YOUTH AGE 14-15

A total of 7.3 million youth age 14-15 were estimated to be residing in the United States in 1979. Table 2B.1 presents selected characteristics of the very young by race and sex. Virtually all of them (98 percent) are currently attending school. However, about one-fourth of those age 14-15 were currently employed when interviewed in the spring of 1979.[2] Overall, they had a labor force participation rate (LFPR) of 38 percent and an unemployment rate of 34 percent. Attention must therefore be given to the characteristics of youth age 14-15 who

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[2] Youth interviewed after May 1979 are excluded to control for the large influx of students to the labor force during the summer. These youth are assumed to be distributed proportionately to those who were interviewed prior to the summer.

Table 2B.1 Selected Characteristics of Youth Age 14-15 by Race and Sex

Characteristic	BLACK			HISPANIC			WHITE			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Region												
Northeast	18	18	18	19	24	22	21	21	21	21	21	21
North central	21	21	21	11	6	8	32	36	34	29	32	30
South	56	55	56	27	26	27	31	26	28	34	30	32
West	5	6	5	43	44	44	17	17	17	17	17	17
Enrollment status												
Dropout	2	1	2	2	3	2	1	2	2	2	2	2
High school	98	99	98	98	97	97	99	98	98	99	98	98
College	0	0	0	0	*	*	0	0	0	0	0	0
Education attended												
0	1	0	*	0	1	*	0	*	*	*	*	*
1-8	71	75	73	75	75	75	66	71	68	67	72	69
9-11	29	25	27	25	24	25	34	29	32	33	28	30
12	0	0	0	0	*	*	0	0	0	0	*	0
13+	0	0	0	0	0	0	0	0	0	0	0	0
Health												
Good	93	98	96	93	95	94	96	94	95	95	94	95
Poor	7	2	5	7	5	6	4	7	5	5	7	5
Ever participated in government training												
No	90	85	88	96	90	93	98	96	97	97	94	95
Yes	10	15	12	4	11	8	2	4	3	3	6	5
Marital status												
Never married	100	100	100	99	100	100	100	100	100	100	100	100
Married	0	0	0	1	0	*	1	0	0	0	0	*
Divorced, separated Widowed	0	0	0	0	*	*	0	0	0	0	0	0
Has a child												
No	98	99	98	99	99	99	100	100	100	100	99	99
Yes	2	2	2	1	1	1	*	1	*	*	1	1

Table 2B.1 (continued)

Characteristic	BLACK			HISPANIC			WHITE			TOTAL		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Family income												
5000	23	17	20	13	15	14	3	3	3	7	6	6
5-9,999	29	34	32	25	30	28	13	12	12	16	16	16
10-14,999	19	19	19	23	18	21	12	16	14	14	16	15
15-19,999	15	15	15	16	16	16	15	18	16	15	17	16
20-24,999	6	8	7	9	7	7	20	22	21	17	19	18
25-29,999	4	5	4	3	4	4	14	11	12	12	9	11
30-39,999	2	1	2	9	6	7	13	11	12	11	9	10
40,000 or more	2	2	2	3	5	4	9	9	9	7	8	7
ESR[1]												
E/P ratio	7.0	11.0	9.1	13.8	19.1	16.6	26.9	29.5	28.3	23.2	26.2	24.8
LFPR	26.3	37.3	32.0	27.5	37.5	32.8	36.1	42.0	39.2	34.1	41.1	37.8
Percent unemployed	73.2	70.5	71.6	49.9	49.0	49.4	25.4	29.8	27.8	31.9	36.2	34.4

Youth interviewed after May, 1979, are excluded to control for the large influx of students to the labor force during the summer. These youth are assumed to be distributed proportionaetly to those who were interviewed prior to to summer. (N=2,731,200)

UNIVERSE: Civilian youth age 14-15 on interview date (N=7,30,300).

*Percentage between 0.1 and 0.5

hold jobs and of those looking for work.

White youth age 14-15, for example, participated more in the labor force than either blacks or Hispanics and also were two to three times more likely to be employed than minority youth. Males participated more in the labor force than females and males were also more likely to be employed. White males and females, however, had higher employment/population ratios than minority youth, irrespective of sex.

Among males, nearly a third of the whites in the labor force were unemployed in contrast to half of the Hispanics and 71 percent of the blacks. One in every four white females was unemployed, but half of the Hispanic females and about three-fourths of the black females in the labor force were unemployed.

The amount of education obtained and family income also varied by race. For example, about a third of the white youths have obtained 9 to 11 years of schooing, but only about one-fourth of black and Hispanic youth have attained this education level. Even at this early age, Hispanics and blacks are trailing whites in terms of education. In addition, 20 percent of the blacks and 14 percent of the Hispanics had family incomes below $5,000 in comparison to only 3 percent of the whites.

Other than major differences in education and family income, youth 14-15 years old tend to be overwhelmingly in school, single, without children, residing with their parents, and in general good health. Blacks and Hispanics were, however, more likely to have participated in governmental training or subsidized employment.

III. THE NLS AND CPS COMPARISON OF EMPLOYMENT STATUS

The NLS estimated substantially more labor market activity for youth age 14-15 than the employment status estimates obtained by the March 1979 Current Population Survey (CPS). Table 2B.2 compares the NLS and CPS estimates of employment status.[3] Overall the NLS youth sample yielded substantially higher labor force participation rates, employment/population ratios and unemployment rates than the CPS. In the NLS sample the labor force participation rate and unemployment rate of youth age 14-15 were more than twice the CPS rate, and the employment/population ratio was about one and a half times higher than the CPS. The differentials were even much more acute for black youth. For example, the CPS reported an LFPR of 6 percent for blacks but the rate was 32 percent in the NLS.

These differences may be explained in a variety of ways.[4] While the NLS uses CPS procedures and questions to determine labor force status, the NLS interviewers talked to the youth themselves and asked for responses directly from the youth, but the CPS interviews an adult member of the household. It is hypothesized that this interview difference accounts for the

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[3] To minimize survey differences between the NLS sample and the CPS, the white and other race cohort and the Hispanic cohort in the NLS are combined to yield a white race group, since in the CPS the white group includes Hispanics.

[4] For a discussion of reasons for the CPS and NLS difference, refer to Richard Santos, "Measuring the Employment Status of Youth: A Comparison of the Current Population Survey and the National Longitudinal Survey.

Table 2B.2 The Employment Status of Youth 14-15: NLS and CPS[a]

Sex	LFPR			% Unemployed			E/P ratio		
	NLS	CPS	Dif.	NLS	CPS	Dif.	NLS	CPS	Dif.
	Black[b]								
Total	32.0	5.7	26.3	71.6	36.0	35.6	9.1	3.7	5.4
Female	26.3	4.1	22.2	73.2	-	73.2	7.0	2.6	4.4
Male	37.3	7.3	30.0	70.5	-	70.5	11.0	4.7	6.3
	White[c]								
Total	38.6	18.9	19.7	29.3	12.4	16.9	27.3	16.5	10.8
Female	35.4	18.0	17.4	26.9	9.8	17.1	25.9	16.3	9.6
Male	41.7	19.7	22.0	31.2	14.9	16.3	28.7	16.8	11.9
	Total								
Total	37.8	16.7	21.1	34.4	13.8	20.6	24.8	14.4	10.4
Female	34.1	15.7	18.4	31.9	11.0	20.9	23.2	14.0	9.2
Male	41.1	17.1	23.4	36.3	16.2	20.1	26.2	14.8	11.4

[a] CPS figures are for March, 1979.

[b] NLS excludes other races from Black category. CPS includes other races in Black category.

[c] NLS includes Hispanics and other races in White category. CPS includes Hispanics but not other races in White category.

UNIVERSE: Civilian youth age 14-15 on interview date currently in labor force (N=2,799,900) substantial employment activity and job search activity obtained for youth age 14-15 in the NLS survey.[5]

Employed Youth 14-15 Years Old

A total of 1.8 million youth age 14-15 were working when interviewed in 1979, but Table 2B.3a shows that approximately 63 percent were working nine hours or less per week. Hispanic and black youth tended to work slightly longer hours than whites. For example, a third of the black females were working 20 hours or more in the survey week. The tendency of minorities to work longer hours is more clearly illustrated in Table 2B.3b, which shows the mean hours worked during the survey week.[6] Even with these variations by race in hours worked, employed youth age 14-15 are primarily part-time workers.

Table 2B.4 presents the main reasons why the very young worked part-time during the survey week. As one would expect, a substantial majority (63 percent) of these very young youths who worked less than 35 hours per week cited school as the main reason for their part-time employment. School attendance was cited more often by black males and Hispanic females for their part-time employment. A fourth of the employed black females, however, indicated that they worked less than full time because

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[5] The sample size in the CPS, especially among black youth, is so small that the unemployment rates for black males and females have very broad confidence intervals. In contrast, while the number of observations is still relatively small in the NLS, much more precise employment status estimates can be made.

[6] Information is also available for the usual number of hours worked weekly, but it differs little from the survey week data.

Table 2B.3A Distribution of Hours Worked During Survey Week: Youth 14-15 Years by Race and Sex

Number of hours	Black			Hispanic			White			Total		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
1-9	49.1	43.4	45.4	35.5	54.9	47.5	67.8	61.4	64.5	65.9	60.0	62.8
10-19	20.0	20.7	20.5	44.9	27.0	33.8	21.5	23.4	22.5	22.3	23.4	22.9
20-34	14.5	21.0	18.6	9.7	11.1	10.5	9.1	10.6	9.8	9.3	11.2	10.3
35-40	16.4	8.3	11.2	2.2	3.8	3.2	1.6	2.5	2.1	2.2	3.0	2.6
41-72	0	6.6	4.2	7.7	3.3	4.9	0	2.1	1.1	0.3	2.4	1.5

UNIVERSE: Civilian youth age 14-15 reporting hours worked during survey week among the employed youth. (N=1,556,400)

Table 2B.3B Mean Hours Worked During Survey Week and Mean Hours Usually Worked: Youth Age 14-15, by Race and Sex

Sex	Black	Hispanic	White	Total
	Hours worked survey week			
Total	15.9	13.4	9.7	10.2
Female	15.4	15.5	8.9	9.4
Male	16.1	12.2	10.4	10.9
	Usual hours worked			
Total	14.6	14.3	10.7	11.1
Female	15.7	13.9	9.7	10.1
Male	14.0	14.5	11.7	12.0

UNIVERSE: Civilian youth age 14-15 reporting usual hours worked and hours worked during survey week. (N=1,556,400)

Table 2B.4 Mean Reason Youth Age 14-15 Worked Part Time, Survey Week

Reason	Black			Hispanic			White			Total		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Slack work	5	0	2	6	11	9	11	8	9	10	7	9
Material shortage	0	0	0	0	0	0	0	1	*	0	1	*
Plant/machine repair	0	0	0	0	0	0	1	1	1	1	1	1
Only part time work available	28	4	13	9	10	9	6	5	5	7	5	6
Bad weather	0	0	0	0	0	0	0	1	*	0	1	*
Own illness	0	0	0	0	0	0	0	*	*	0	*	*
Attends school	62	77	72	73	62	67	63	62	63	63	63	63
Too busy	0	3	2	0	0	0	1	0	*	1	*	1
Did not want full time	0	0	0	0	0	0	4	4	4	3	3	3
Full time week is under 35 hrs.	5	7	6	3	7	5	2	9	6	2	8	6
Other	0	10	6	9	10	10	13	11	12	13	11	12

*Percentage is between 0.1 and 0.5.

UNIVERSE: Civilian youth age 14-15 reporting reasons for working part-time during survey week. (N=1.792,400) only part-time work was available. In addition, one-fifth of the Hispanic males gave the combined reasons of slack work and the unavailability of full-time work for their part-time employment.

Table 2B.5 reveals that during the 1979 survey week, employed youth earned on average about $2.37 an hour, less than the then current federal minimum wage of $2.90. Of all employed youth, white females earned the lowest mean hourly rate, $1.87. Hispanic males and females earned the highest hourly rates. Earnings of the youth age 14-15 thus vary by both race and sex, and part of the reason for the difference may be found in their occupations and industries.

Occupational/Industrial Distribution

According to Table 2B.6, four major types of occupations (private household workers, service workers, sales workers, and laborers) provided employment for more than four out of every five youth age 14-15 employed during the survey week. The distribution of occupations varied both by race and sex. For example, over half the white female workers were engaged in private household work, presumably as baby sitters.[7] Black females and especially Hispanic females were less likely to work as baby sitters or to do other private household work. With the exception of black females employed in service occupations, minority females were more likely than whites to work in service

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[7] Child care workers accounted for 91 percent of the private household occupations among employed white females, 72 percent of black females, and 79 percent of Hispanic females.

Table 2B.5 Mean Hourly Rate of Pay During Survey Week: Youth Age 14-15, by Race and Sex

(in dollars)

Sex	Black	Hispanic	White	Total
	Rate of pay survey week			
Total	2.68	3.00	2.33	2.37
Female	2.72	2.89	1.87	1.93
Male	2.66	3.07	2.76	2.76

UNIVERSE: Employed civilian youth age 14-15 reporting hourly rate of pay during survey week (N=1,556,400)

Table 2B.6 Occupation in Survey Week: Youth Age 14-15, by Race and Sex

Occupation	Black			Hispanic			White			Total		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Professional	0	4	2	0	0	0	0	2	1	0	2	1
Sales worker	21	9	13	6	7	7	7	26	18	8	25	17
Clerical	23	5	11	18	3	7	6	5	6	7	5	6
Craftsmen	0	1	1	0	3	2	0	4	2	0	3	2
Operatives	0	2	1	0	3	2	0	5	3	0	5	3
Operatives/trans	0	0	0	0	0	0	0	2	1	0	2	1
Laborers, exc. farm	0	41	26	2	37	23	0	27	14	*	29	16
Farmers, mgrs.	0	0	0	0	0	0	1	0	*	1	0	*
Farm laborers, foreman	0	6	4	2	13	9	2	4	3	2	4	3
Service	19	34	28	53	28	38	25	21	23	26	22	24
Private HH workers	37	0	13	20	5	11	58	4	31	56	4	29

UNIVERSE: Civilian employed youth age 14-15 reporting occupational involvement during survey week. (N=1,547,300) or clerical occupations. Over half of the Hispanic females were employed in service occupations, and clerical work provided a fifth of the employment for both blacks and Hispanics. In addition, sales work accounted for a fifth of black female employment but it was not important for white or Hispanic females.

For the very young males, and especially minority ones, laboring (excluding farm labor) was the predominant occupation. Black males were more likely to be employed in service occupations than white males; one-third for blacks versus one-fifth for whites. In addition, sales work accounted for one-fourth of the jobs among white males but only a very small proportion of minorities. Among employed white males in sales occupations, nine out every ten were newspaper boys.

Table 2B.7 presents the distribution of employment by major industries for employed youth age 14-15. Personal services and the retail industry collectively provided the bulk of total employment, about six out of every ten jobs. For the very young females, baby sitting is an important source of employment and it is therefore not surprising that personal services accounted for over half of the white female employment and one-third of minority females. Personal services also provided one-fifth of white and Hispanic employment for males but only 12 percent for blacks.[8] The retail industry provided the second major source of

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[8] As with females, private households account for most of the personal service employment. Females were, however, more likely to be engaged in baby sitting and males in yard work.

Table 2B.7 Type of Industry During Survey Week: Youth Age 14-15, by Race and Sex

Industry	Black			Hispanic			White			Total		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Agriculture, Forestry, farming	0	11	7	2	13	9	4	6	5	4	7	5
Mining	0	0	0	0	0	0	0	1	*	0	1	*
Construction	0	0	0	4	2	3	2	4	3	2	4	3
Manufacture durables	0	9	6	0	2	1	0	1	1	0	2	1
Manufacture nondurables	12	3	7	0	3	4	6	27	17	6	24	15
Trans/public utilities	0	7	5	0	2	1	0	1	*	0	1	1
Wholesale trade	5	0	2	0	0	0	0	1	1	*	1	1
Retail	25	34	31	42	34	37	22	24	23	23	25	24
Finance, insurance, real estate	0	2	2	2	0	1	0	2	1	*	2	1
Business/repair	5	9	8	0	13	8	1	4	2	1	5	3
Personal service	32	12	19	32	22	26	61	20	40	59	20	39
Entertainment/ recreation	0	4	3	8	0	3	2	4	3	2	4	3
Professional	21	8	13	9	6	7	3	4	4	4	4	4
PA	0	0	0	0	0	0	0	3	1	0	2	1

*Percentage between 0.1 and 0.5.

UNIVERSE: Civilian employed youth age 14-15 reporting industrial involvement during survey week. (N=1,547,300) jobs for the very young. Proportionately more black and Hispanic youth were employed in retail than whites.[9]

The largest proportion of white males were employed in the nondurable manufacturing industries; and agriculture, even though not a major source of jobs, provided more jobs for minority males than whites. In addition, the professional industry accounted for more employment among minority youth, especially black females.[10]

Unemployed Youth: 14-15 Years Old

Slightly less than one million youths age 14-15 were unemployed during the 1979 survey week. As noted in Table 2B.8a virtually all of these unemployed youth were seeking part-time work. The larger proportion of very young black females seeking full-time work is consistent with an earlier finding that employed black females would prefer to work longer hours. Table 2B.8b shows that unemployed youth had been searching on average about seven weeks for work. With the exception of Hispanic and black females, variations in mean weeks looked for by race and sex were slight.

Table 2B.9 presents, by sex and race, the various ways unemployed youth sought work.[11] The most popular method among

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[9] Eating and drinking establishments provided the majority of jobs within the retail industry for both whites and Hispanics. Blacks were, however, more likely to be employed in grocery stores.

[10] CETA and other related manpower employment programs are classified in the professional industry and this may account for the higher representation of minorities.

Table 2B.8 Type of Employment Sought and Mean Weeks Looked by the Unemployed Youth Age 14-15, by Race and Sex

Table 2B.8a Percent Looking for Full and Part Time

	Black			Hispanic			White			Total		
	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
Full	36	25	29	0	11	8	10	29	20	12	27	21
Part	64	75	71	100	89	92	90	91	80	88	73	80

Table 2B.8b Mean Number of Weeks Looked for Employment

Black			Hispanic			White			Total		
Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total
5.0	6.1	5.7	12.0	7.5	8.9	7.8	6.0	6.8	7.6	6.1	6.8

UNIVERSE: Unemployed civilian youth age 14-15. (N=938,800)

Table 2B.9 Job Search Techniques of Unemployed Youth, Age 14-15 Years by Sex and Race

Search technique	Total	Sex		Race		
		Female	Male	Black	Hispanic	White
State employment agency	3	2	3	2	4	3
Private employment agency	2	2	1	1	1	3
Employer directly	54	45	61	50	66	54
Friends, relatives	19	19	19	13	18	21
Placed, answered ads	5	8	3	6	2	5
Looked in newspaper	25	28	24	30	18	25
School employment service	12	15	10	22	7	8
Other	18	17	18	11	19	20

UNIVERSE: Unemployed civilian youth age 14-15 (N=938,800).

youth age 14-15 for locating employment was to contact an employer directly. Looking in the newspaper and friends/relatives were the second and third most popular job search information sources. Males relied on direct employer contact more than females and Hispanics searched the newspaper less frequently than other youth.

NLS Survey Comparison: 1966, 1968, and 1979

The employment status of youth age 14-15 in the 1979 survey can be compared with those of previous NLS surveys. The NLS first gathered data for male youth in 1966 and female youth in 1968. Table 2B.10 presents the employment status of youth age 14-15 during the interview week for the survey years. In general, the LFPR of males declined from 1966 to 1979 for both whites and blacks but more dramatically for blacks. For black males, LFPR dropped by 24 percent during this 13-year period in comparison to only a 7 percent decline for whites. Female LFPR, however, increased by over one-fourth between surveys for both blacks and whites. The employment/population ratio dropped more dramatically for black males than for whites. In 1966, over a third of blacks age 14-15 were employed as compared to only 11 percent in 1979. For both white and black females, the employment/population ratio varied slightly between surveys. Unemployment among youth age 14-15 was greater in 1979 than in

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[11] While more than one method can be used to search for jobs, nearly 66 percent of the youth relied on only one technique. Over half of the youth relied on directly contacting an employer to find work.

Table 2B.10 Employment Status of Youth Age 14-15 by NLS Survey Year

NLS survey year	Black		White and others	
	Female	Male	Female	Male
	Labor force participation rate			
1966, 1968	20.7	49.2	27.9	45.2
1979	26.3	37.3	36.1	42.0
Difference	5.6	11.9	8.2	3.2
	Employment/population ratio			
1966, 1968	7.5	35.8	24.1	35.6
1979	7.0	11.0	26.9	29.5
Difference	.5	24.8	2.8	6.1
	Percent unemployed			
1966, 1968	63.9	27.3	13.7	21.4
1979	73.2	70.5	25.4	29.8
Difference	9.3	43.2	11.7	8.4

UNIVERSE: Civilian youth age 14-15 in the labor force in 1979 (N=2,799,900), in 1966 (males, N=1,692,700) and in 1968 (females, N=1,007,800).

1966 and 1968. For black males, however, unemployment more than doubled between surveys.

As in 1979, virtually all youth age 14-15 in 1966 and 1968 were enrolled in school. Table 2B.11a shows, however, an increase in the school enrollment of black youth from the earlier NLS survey years. In addition, Table 2B11b shows that with the exception of white males the proportion of youth seeking part time work between surveys did not show substantial variation. Among employed youth, Table 2B.11c indicates that mean hours worked per week remained constant for white females and decreased for white males between surveys. For employed blacks, mean hours worked increased by 5 hours for females and only slightly for males between surveys.

The most vivid survey change among employed youth age 14-15 occurred in their occupational and industrial distribution. In comparison to 1966 and 1968, the 1979 survey reflected the decline in employment of farm labor occupations and of the agricultural sector in the economy. For example, in 1966, among males, farm labor employed about a fifth of the whites and a quarter of the blacks, but by 1979, only a minute proportion were employed. Furthermore, the 1979 survey indicated an overall increase in employment of youth age 14-15 in sales, clerical, and service occupations, and in wholesale/retail and manufacturing sectors. Tables 2B.12 and 2B.13 present, respectively, the occupational and industrial distribution in the different survey years.

These survey changes in the occupational and industrial

Table 2B.11 School Enrollment, Part Time Work Sought, and Mean Hours Worked by NLS Survey Year for Youth Age 14-15, by Race and Sex

2B.11a Percent of Youth Enrolled in School

NLS survey year	Black		White	
	Female	Male	Female	Male
1966, 1968	93	95	98	98
1979	98	99	99	98

2B.11b Percent of Unemployed Youth Seeking Part Time and Full Time Work

NLS survey year	Black		White	
	Female	Male	Female	Male
Full time				
1966, 1968	15	9	5	4
1979	16	10	1	10
Part time				
1966, 1968	85	91	95	97
1979	84	90	99	90

2B.11c Mean Hours Worked by Employed Youth

NLS survey year	Black		White		Total	
	Female	Male	Female	Male	Female	Male
1966, 1968	10.6	15.8	8.6	13.5	8.7	13.8
1979	15.4	16.0	8.9	10.4	9.4	10.9

Table 2B.11a: UNIVERSE: Civilian youth age 14-15 during survey week in 1979 (N=7,309,300), in 1966 (males, N=3,696,800) and in 1968.

Table 2B.11b: UNIVERSE: Civilian youth age 14-15 unemployed during survey week in 1979 (N=938,800), in 1966 (males, N=376,000), and in 1968 (females, N=186,900).

Table 2B.11c: UNIVERSE: Civilian youth age 14-15 employed during survey wee reporting hours worked during survey week in 1979 (N=1,556,400), in 1966 (males, N=1,316,700) and in 1968 (females, N=810,900).

Table 2B.12 Occupational Distribution of Employed Youth Age 14-15 by NLS Survey Year , Race and Sex

Occupation and year	Black		White and others	
	Female	Male	Female	Male
Professional				
1966, 1968	1	0	3	2
1979	0	4	0	2
Clerical				
1966, 1968	10	2	4	5
1979	29	5	6	5
Sales workers				
1966, 1968	2	8	6	16
1979	21	9	8	27
Craftsmen				
1966, 1968	0	2	*	4
1979	0	1	0	4
Operatives				
1966, 1968	0	10	2	9
1979	0	2	0	8
Private HH workers				
1966, 1968	49	3	59	1
1979	37	0	58	4
Service work				
1966, 1968	20	23	16	15
1979	19	33	29	21
Farmers, farm managers				
1966, 1968	-	0	0	*
1979	0	0	1	0
Farm labor, foreman				
1966, 1968	17	24	9	21
1979	0	6	2	4
Laborer, other than farm or mine				
1966, 1968	1	28	1	27
1979	0	41	0	27

*Percentage between 0.1 and 0.5

UNIVERSE: Civilian youth age 14-15 employed during survey week, reporting occupation in 1979 (N=1,547,300) in 1966 (males, N=1,316,700) and in 1968 (females, N=810,900).

Table 2B.13 Industrial Distribution of Employed Youth Age 14-15 by NLS Survey Year, Race and Sex

Industry	Black		White and others	
	Female	Male	Female	Male
NLS survey year				
Agriculture, forestry, fisheries				
1966, 1968	17	25	10	23
1979	0	11	4	6
Construction				
1966, 1968	-	3	0	4
1979	0	0	2	4
Manufacturing				
1966, 1968	0	8	1	15
1979	12	12	6	28
Trans., communication, public utilities				
1966, 1968	-	1	0	2
1979	0	7	0	1
Wholesale/retail trade				
1966, 1968	9	27	17	30
1979	31	34	22	25
Finance, insurance, real estate				
1966, 1968	-	0	-	1
1979	0	2	0	2
Business and repair				
1966, 1968	0	4	*	4
1979	5	9	1	4
Personal services				
1966, 1968	59	18	63	11
1979	32	12	61	20
Entertainment, recreation				
1966, 1968	2	2	2	6
1979	0	4	2	4
Professional				
1966, 1968	11	8	7	5
1979	21	8	3	4
Public administration				
1966, 1968	3	2	*	1
1979	0	0	0	3

*Percentage between 0.1 and 0.5

UNIVERSE: Civilian youth age 14-15 employed during survey week, reporting occupation in 1979 (N=1,547,300), in 1966 (males, N=1,316,600) and in 1968 (females, N=810,900).

distribution of employed youth were not reflected uniformly by race or sex. For example, by 1979 the proportion of blacks engaged as laborers (other than in farms or mines) increased to two-fifths but remained constant for whites. Service occupations also increased for both white and black males but more so for blacks. By industrial sectors, the proportion of white males in manufacturing increased from 15 percent in 1966 to over one-fourth in 1979.

Among females, employment as private household workers accounted for half of the jobs in 1968 for both blacks and whites; in 1979, private household work remained constant for whites but declined to over a third for blacks. Black females increased their proportions in both clerical and sales occupations to over two-fifths in 1979 versus less than one-sixth in 1968. Clerical and sales occupations did not exceed one-sixth of the jobs for white females in the two survey years. Service occupations, however, increased for whites between surveys but remained constant for blacks.

Major Findings and Conclusions

Virtually every teenager 14-15 years old is currently enrolled in school, and it is understandable why their employment status is reported by the Bureau of Labor Statistics but not included in the total civilian labor force. Yet approximately two million teenagers age 14-15 were estimated to have worked on average about 10 hours during the NLS survey week and another million were looking for work. The employment status obtained by the 1979 NLS youth survey suggests substantially more labor market activity than the CPS demonstrates for the very young.

A substantial proportion of teenagers age 14-15 are holding jobs or looking for work, although most youngsters seek part-time work because of school attendance. Opportunities to work among the very young have been influenced by several factors. For example, a decline in agricultural employment has reduced the availability of jobs and may account for the decline in the male LFPR in 1966 and 1979. However, the general decline in the LFPR did not hold for females. The availability of baby sitting jobs and a greater acceptance of girls working has facilitated their employment.

For black males and females, however, getting a job is nearly impossible. In survey week 1979, seven out of every ten blacks age 14-15 were unable to find work. The employment status of the very young is very likely to be dependent on neighborhood jobs such as mowing lawns, sacking groceries, food services, and baby sitting. For blacks in low income neighborhoods, these jobs may not exist.

Only minimal attention has been given to the relationship between work and school for the very young. The preliminary data, however, indicate that minorities age 14-15 are in families with lower incomes and they trail whites in educational attainment. In comparison to whites, there are also fewer jobs available to them. How these con-ditions will influence the schooling and employment experiences of minorities during the teen years requires further study.

Chapter 2 References

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CHAPTER 3

YOUTH EMPLOYMENT CONDITIONS AND THE WAGE STRUCTURE IN THE YOUTH LABOR MARKET

by David Shapiro

I. DESCRIPTIVE STATISTICS ON YOUTH EMPLOYMENT CONDITIONS

The majority of employed youth normally work at part-time jobs; nearly a third of employed youth work fewer than 20 hours per week (Table 3.1). School enrollment is the key factor here: part-time jobs are held by over 90 percent of the employed who are enrolled in high school and over 75 percent of the employed enrolled in college, but by less than 20 percent of the employed youth who are not in school. These data suggest that growth in the availability of part-time employment has been a major factor contributing to the secular increase in labor force participation rates of enrolled youth.

Table 3.2 shows the occupational distributions of employed youth by sex and enrollment status. Comparison of youth employment with total employment reveals that youth are underepresented in higher-level white collar occupations (professional and technical workers, managers and administrators) and in craft positions, as might be expected from their lack of experience and skills. Overrepresentation of youth is most apparent in the service sector, and among laborers and private household workers.

Close to 30 percent of employed students work in service occupations. A fourth of employed males in high school work as laborers, while similar proportions of their female counterparts work in clerical occupations and as private household workers.

Table 3.1 Usual Hours Worked per Week, by School Enrollment Status

(Percentage distributions)

Usual hours worked	High school dropout	High school student	College student	Nonenrolled high school graduate	Total
1-19	6	61	45	4	31
20-34	14	32	33	12	23
35 or more	79	7	23	84	46
Total percent	100	100	100	100	100

UNIVERSE: Civilians age 14-21 on January 1, 1979 who were employed on the interview date. (N=16,222,000)

Table 3.2 Occupation, by Sex and Enrollment Status

(Percentage distributions)

Occupation	High school dropouts		High school students		College students		Nonenrolled HS graduates		Total		Total
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
Professional, technical	1	1	2	2	7	11	5	4	4	4	4
Managers, administrators	1	2	1	1	3	4	4	5	2	3	3
Sales	4	2	9	12	8	9	9	3	9	7	8
Clerical	15	2	23	6	43	16	46	7	35	7	20
Craft	3	19	1	5	1	11	2	23	1	14	8
Operatives (except transportation)	27	25	2	8	4	7	10	21	7	15	11
Transportation operatives	1	8	1	3	0	1	0	8	0	5	3
Laborers (nonfarm)	5	23	2	25	3	13	2	16	3	20	12
Farmers	0	0	0	1	0	0	0	0	0	0	0
Farm laborers	2	4	1	7	0	1	0	3	1	5	3
Service workers (except private household)	28	14	32	30	29	27	21	10	27	20	23
Private household workers	13	1	26	1	3	1	2	0	11	1	6
Total percent	100	100	100	100	100	100	100	100	100	100	100

UNIVERSE: Civilians age 14-21 on January 1, 1979, who were employed on the interview date. (N=16,222,000)

More than two-fifths of the working college women had jobs in clerical occupations, while the young men worked in a wider variety of occupations. Ooccupational segregation is readily apparent among the predominantly part-time jobs held by students as well as among those held by nonstudents.

The influence of educational attainment on early occupational assignments can be inferred from a comparison of the occupations of dropouts with those of nonenrolled high school graduates. Nearly half of female graduates work in clerical occupations and another fifth are employed as service workers; but among female dropouts service work is the most populated group, one-fourth work as operatives, 15 percent are in clerical positions, and 13 percent work as private household workers. Among males not in school, one-fifth of the graduates are in white-collar jobs compared to 7 percent of the dropouts. With regard to blue-collar jobs, operatives are most numerous among both graduates and dropouts, but for dropouts laborers are the next most sizable group while for graduates this distinction goes to the craft occupations. Even at this highly aggregative level, it appears that failure to complete high school serves as a constraint on those youth with aspirations for higher-level blue-collar and white-collar jobs.

Examination of the industry mix of employed youth (Table 3.3) confirms the importance of service occupations noted previously. High proportions of youth are employed in retail trade (more than 40 percent of the employed in this group work in "eating and drinking places") and in the service sector.

Table 3.3 Industry Employment, by Sex and School Enrollment Status

(Percentage distributions)

Industry (% of total employment)	High school dropouts		High school students		College students		Nonenrolled HS graduates		Total		Total
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
Agriculture, mining	4	9	2	9	2	1	2	7	2	7	5
Construction	2	17	1	3	0	3	1	13	1	8	5
Manufacturing, durables	11	20	1	3	2	9	8	23	5	13	9
Manufacturing, nondurables	17	7	4	11	5	5	8	8	7	8	8
Transportation, communication	3	5	0	1	1	3	3	5	2	3	3
Wholesale trade	1	4	1	2	1	3	2	3	1	3	2
Retail trade, including restaurants	32	18	43	43	37	33	32	24	37	31	34
Finance, insurance, real estate	3	1	3	2	4	3	13	2	7	2	4
Business, repair services	2	10	2	6	1	8	3	7	2	7	5
Personal services	16	3	29	8	5	5	4	1	14	4	9
Entertainment, recreation services	0	1	2	4	2	4	1	1	2	3	2
Professional, related services	11	3	12	8	37	22	20	4	19	8	13
Public administration	1	2	1	2	3	2	3	3	2	2	2
Total percent	100	100	100	100	100	100	100	100	100	100	100

UNIVERSE: Civilians age 14-21 on January 1, 1979 who were employed on the interview date. (N=16,222,000)

Conversely, youth are most notably underrepresented in public adminstration[1] (in comparison with the entire civilian labor force). Data on industrial distribution also confirm the observation that school enrollment status strongly affects employment patterns. Students are clearly more likely to be in retail trade than nonstudents: 43 percent of those enrolled in high school and 35 percent of those enrolled in college are in this industry group compared with 22 and 28 percent of dropouts and nonenrolled high school graduates, respectively. As with the occupational distributions, young women tend to be more highly concentrated within a limited number of industrial groupings than their male counterparts, regardless of school enrollment status. Within each school enrollment group, except high school students, young women are more likely to be in retail trade than young men. A similar pattern is apparent for the service sector. Among employed males a fifth of high school students and nearly a third of college students are in personal services, entertainment and recreation services, and professional and related services, compared to fewer than 10 percent of their nonenrolled counterparts. Among employed females, over 40 percent of enrolled youth are in these industries compared to about 25 percent of the nonenrolled. More flexible hours help attract students to the service sector in greater numbers than nonstudents.

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[1] Since some youth employed in the public sector are not classified under "public administration," the 2 percent figure understates the public sector share of youth employment. This share is 8 percent--roughly half that for the total labor force.

Differences by educational attainment are also apparent. Male student, tend to move away from agriculture, nondurable manufacturing, and retail trade and toward durable goods manufacturing and professional and related services as they proceed from high school to college. Female student, shift slightly away from retail trade, and more so from personal services, toward professional and related services as they move from high school to college. Nonenrolled male high school graduates are slightly less likely than dropouts to be in agriculture, construction, business and repair services, and personal services, and slightly more likely to be in manufacturing and retail trade. Nonenrolled female high school graduates appear less frequently than dropouts in manufacturing and personal services, and more frequently in finance, insurance, and real estate as well as in professional and related services.

Youth wage rates reflect educational attainment and prior work experience, the nature of jobs held (occupation, industry, unionization, etc.), region and city size, race, sex, and other factors. Because examination of each of these factors using tabular analyses would be most unwieldy, the relationship between wages and a limited number of variables of particular interest--school enrollment status, race, sex, occupation, and industry--will be described here.[2]

Mean hourly wage rates by school enrollment status, sex, and race jointly are provided in Table 3.4.[3] A clear hierarchy of

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[2] Results of multivariate analyses of the determination of youth wages are reported below.

Table 3.4 Mean Wage Rates, by School Enrollment Status, Sex and Race

(in dollars)

Enrollment status	Female			Male			Total average
	Black	Hispanic	White	Black	Hispanic	White	
High school dropout	2.67	3.10	2.97	3.47	3.91	4.04	3.64
High school student	2.75	2.61	2.37	3.00	2.97	2.85	2.65
College student	3.48	3.51	3.22	3.38	3.83	3.84	3.52
Nonenrolled high school graduate	3.53	3.60	3.63	4.25	4.57	4.79	4.16
Total	3.24	3.21	3.07	3.57	3.72	3.83	3.46

UNIVERSE: Civilians age 14-21 on January 1, 1979 who were employed on the interview date, and for whom the calculated hourly rate of pay is at least $0.25 and does not exceed $10.00. (N=16,051,000)

Table 3.5 Female Mean Wage Rates as Percentages of Male Mean Rates, by Race and School Enrollment Status

Enrollment status	Black	Hispanic	White
High school dropout	77.0	79.3	73.5
High school student	91.7	87.9	83.2
College student	103.0	91.6	83.9
Nonenrolled high school graduate	83.1	78.8	75.8
Total	90.8	86.3	80.2

UNIVERSE: Civilians age 14-21 on January 1, 1979 who were employed on the interview date, and for whom the calculated hourly rate of pay is at least $0.25 and does not exceed $10.00. (N=16,051,000) wages by enrollment status appears: students are generally paid less than nonstudents, and within each of these two groups those with more schooling receive higher wages. Overall, then, the average wage of high school students is \$2.65, compared to \$3.52 for college students. Among nonstudents high school dropouts are paid an average of \$3.64 per hour, while high school graduates are paid \$4.16.

The overall rank ordering of these four mean wage rates reflects the pattern for males but not for females: within each race group, female college students earn more on average than their dropout counterparts. Since students are less attached to the work force than dropouts (as measured, say, by current hours of work or by job tenure) we conclude that for males the market values work attachment more heavily than additional schooling, while for females the reverse is true.[4] Alternatively, it appears that female dropouts, much more than their male counterparts, are shunted into low-paying, low-opportunity jobs.

With the single exception of black college students, young men are paid more than young women in the same race/enrollment status group (see Table 3.5). At the same time, consideration of female/male wage ratios reveals that the relative wages of minority women are consistently higher than those of white

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[3] This and subsequent tables on wages are restricted to respondents for whom the calculated hourly rate of pay is at least \$0.25 and does not exceed \$10.00.

[4] This statement is meant only to describe the comparison between high school dropouts and college students, in which there is a clear trade-off between work attachment and educational attainment.

women.[5] This reflects the fact that white males are generally paid more than their minority counterparts, while there is no such race difference among females (who are generally paid less than minority males). The sex differences in average wage rates are distinctly smaller among students: white female students are paid about 83 percent of what white male students receive, while among nonstudents the corresponding percentage is 75. For minorities the female relative wage is almost 80 percent among those not in school and more than 90 percent among students. Thus, when labor force attachment is generally weak--as it is among students--young women receive relatively better wages; but among those for whom work attachment is generally strong, women are at a distinct disadvantage. The extent to which this pay disadvantage reflects factors such as weaker work attachment among women and/or sex discrimination in the labor market requires more sophisticated multivariate analyses to be provided in Section II below.

Wage ratios of blacks and Hispanics relative to whites are shown separately by sex and school enrollment status in Table 3.6. While minority males generally receive lower wages on average than their white counterparts, minority females generally receive higher wages than white females. In addition, mean wage

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[5] This phenomenon is partly explained by white female 14 and 15 year olds entering the labor force as babysitters. If the analysis is confined to 16-22 year olds, white relative wages slightly exceed those of Hispanics for students. The total relative wages are 85.5 for Hispanics, 90.8 for blacks and 81.6 for whites. The wage gap between black and white females is reduced to $0.04, from $0.17 for the 14-22 year olds.

Table 3.6 Black and Hispanic Mean Wage Rates as Percentages of White Mean Wage Rates, by Sex and School Enrollment Status

Enrollment status	Female		Male	
	Black/White	Hispanic/White	Black/White	Hispanic/White
High school dropout	89.9	104.4	85.9	96.8
High school student	116.0	110.1	105.3	104.2
College student	108.1	109.0	88.0	99.7
Nonenrolled high school graduate	97.3	99.2	88.7	95.4
Total average	105.5	104.6	93.2	97.1

UNIVERSE: Civilians age 14-21 on January 1, 1979 who were employed on the interview date, and for whom the calculated hourly rate of pay is at least $0.25 and does not exceed $10.00. (N=16,051,000) rates of Hispanic youth are higher than those of black youth for high school dropouts, college students, and nonenrolled high school graduates of both sexes. Among high school students, race differences in wages manifest a different pattern: blacks receive the highest hourly wage and whites the lowest, among males as well as females. More sophisticated multivariate analysis is done in Section II to study the differences which cannot be accounted for with the present tabular analyses.

An examination of mean hourly rates of pay by occupation and industry (Table 3.7) shows that differences between youth and adult wage rates reflect two factors: the lack of experience and hence skills of much of the youth labor force, and the impact of collective bargaining coverage. Thus, youth in craft occupations receive the highest average wage, followed by operatives, professional and technical workers, and managers and administrators, respectively. The higher pay of those in blue-collar jobs undoubtedly reflects the effects of unionization on wages in these occupations, while the relatively low pay of those in the higher-status white-collar occupation groups stems in large part from their lack of work experience and skills.[6]

At the other end of the wage scale the ranking of occupations is more familiar: pay is lowest by far for private household workers (most of whom are female high school students), followed by farm laborers (the majority of whom are male high

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[6] These white-collar workers are at the bottom of the wage ladders within their respective occupational groups, working as low-level managers and more as technical workers than as professionals.

Table 3.7 Mean Wage Rates, by Occupation and Industry

(In dollars)

A. Mean Wage Rate, by Occupation

Occupation	Mean ($)
Professional, technical	4.18
Managers, administrators	3.69
Sales workers	3.03
Clerical	3.44
Craft and kindred workers	4.55
Operatives, except transportation	4.18
Transport operatives	4.21
Laborers, except farm	3.61
Farmers	a
Farm laborers	2.61
Service workers, except private household	3.17
Private household workers	1.37

B. Mean Wage Rate, by Industry

Industry	Mean ($)
Agriculture	3.00
Mining	5.25
Construction	4.76
Manufacturing durable goods	4.82
Manufacturing nondurable goods	3.59
Transportation	4.66
Wholesale trade	3.83
Retail trade	3.20
Finance, insurance and real estate	3.61
Business and repair services	3.48
Personal services	2.06
Entertainment and recreation services	3.26
Professional and related services	3.28
Public administration	3.93

UNIVERSE: Civilians age 14-21 on January 1, 1979 who were employed on the interview date, and for whom the calculated hourly rate of pay is at least $0.25 and does not exceed $10.00. (N=16,051,000)

[a] Insufficient number of sample cases.

school students). The average hourly wage for both of these groups is well below the minimum hourly wage of $2.90 that was in effect at the time of the survey. Sales workers are about 5 percent above the minimum, while the mean hourly pay of service workers approaches 10 percent above the minimum wage. Both of these latter occupation groups constitute major sectors of student employment.

The pattern of mean wage rates by industry appears to approximate more closely the general industrial wage structure. The most highly paid youth are those in mining, durable goods manufcturing, construction, and transportation--all heavily unionized industries. Paralleling the occupational wage structure of youth, pay is lowest by far in personal services and next lowest in agriculture. Retail trade, entertainment and recreation services, and professional and related services are the next lowest-paying groups; in these industries the average wage is just above 10 percent higher than the minimum wage.

The usual weekly hours of work, occupational distributions, and mean wage rates of employed youth by sex and race jointly were examined separately by enrollment status group.[7] Among employed dropouts, nearly 90 percent of Hispanic youth and 75 percent of black youth work full-time. A sex difference in the proportion of full-time workers is apparent only for white dropouts--67 percent of employed females and 84 percent of employed males normally work full-time. Among employed dropouts white females and black males are least likely to work full-time.

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[7] The resulting tables are not reported here, but are available on request from the Center for Human Resource Research.

High school students work the least hours; whites work fewer hours than minority youth, and in each race group females work somewhat fewer hours than males. Employed college students manifest similar race and sex differences in hours of work but sex differences in hours of work are generally larger among college students than among high school students.

This sex difference is also evident among nonenrolled high school graduates, while the race difference is not. Among Hispanic and white graduates, males clearly work more hours than females. However, race differences in usual hours worked are negligible among females, and among male graduates more than 90 percent of Hispanics and whites work full-time while blacks clearly work the fewest average number of hours per week.

Occupational distributions show distinct differences by sex and race. Among dropouts, minority females are more likely to be working as operatives or as farm laborers and less likely to be employed as service workers than their white counterparts. Minority males (blacks especially) are less likely to be employed in craft jobs than white males. Among female high school students there is a notable difference in the percentage employed as private household workers: 9 percent of blacks compared with 15 percent of Hispanics and 28 percent of whites.

Among employed college students, white females are more likely than their minority counterparts to hold upper-level white-collar jobs or to be service workers, and considerably less likely to be in clerical occupations (40 percent of whites versus

57 percent of Hispanics and 65 percent of blacks). Minority male college students are more likely than whites to be in clerical jobs or (especially for Hispanics) in upper-level white-collar jobs, and less likely to be in sales occupations or working as laborers. Among male high school graduates two differences stand out: whites are clearly more likely than minority youth to be in craft jobs (24 percent versus 17 percent) and less likely to be in service jobs (8 percent versus 21 percent).

In describing the jobs youth have, attention has been focused so far on wages, hours, occupation, and industry. The survey provides data on a number of other significant characteristics of the jobs held by young people. These include objective characteristics of the jobs themselves, such as collective bargaining coverage and class of worker, and such subjective characteristics as job qualities as perceived by youth and job satisfaction.

Collective bargaining directly affects the wages of approximately 13 percent of the youth work force. This percentage, well below the figure for the economy as a whole,[8] largely reflects the part-time nature of much youth employment. Among those working less than 20 hours per week fewer than 6 percent are unionized; but the figure rises to 12 percent for those working 20-34 hours per week and to 19 percent for full-time workers. Fewer than a tenth of students have jobs covered by collective bargaining agreements, while proportionately twice as many nonstudents are covered. Jobs held by males are more likely to be unionized than those held by females (17 percent compared to 9 percent, respectively), and blacks are most heavily unionized (19 percent) while Hispanics are least unionized (11 percent). Youth are somewhat more unionized in the North (16 percent) than in the South or West (10 percent).

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[8] Rees reports that in 1972 union members represented 26.7 percent of nonagricultural employment, while those in unions and employee associations (which often engage in collective bargaining) accounted for 29.8 percent of such employment. See Albert Rees (1977: 11).

Examination of the distribution of the youth work force by class of worker reveals that in comparison with the total civilian work force youth are underrepresented in government employment (8 percent) and in self-employment (4 percent). Minority youth are somewhat disproportionately represented in government employment: nearly 11 percent of employed Hispanic youth and 17.5 percent of employed black youth hold public sector jobs, compared with about 7 percent of white youth. This phenomenon results from higher participation rates of minority youth in government sponsored job and work experience programs.

Employed respondents were asked if they had medical insurance, life insurance, and paid vacations as fringe benefits. The majority of employed youth do not have access to these benefits. As indicated in Table 3.8 below, however, this lack of fringe benefits reflects the fact that the majority of employed youth are working part-time. The percentage of youth with access to these benefits increases with hours of work.

Table 3.8 Percent with Access to Selected Fringe Benefits, by Hours Worked per Week

Usual hours worked	Percent with access to:		
	Medical insurance	Life insurance	Paid vacations
1-19	12	4	11
20-34	28	16	34
35 or more	66	48	76
Total	42	28	47

UNIVERSE: Civilians age 14-21 on January 1, 1979 who were employed on the interview date. (N=16,222,000)

Among youth employed full-time nearly half are covered by life insurance, two-thirds by medical insurance, and three-fourths receive paid vacations.

Employed youth were asked how long it usually takes them to get from home to work. Over a third live within five minutes of their jobs, and the majority works less than 15 minutes from home. Travel time to work is distinctly shorter for youth than for the total civilian labor force. Among all employed workers just over one-fifth travel fewer than 10 minutes to work, and more than one-fourth travel 30 minutes or more to work.[9] As indicated by Table 3.9 below, time to work is significantly related to enrollment status. Nearly half of employed high school students and more than a third of employed college students work within 5 minutes of home, while this is true of fewer than a fourth of nonstudents. Sixty to seventy percent of

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[9] Figures taken from Table L of U.S. Department of Commerce (1979).

Table 3.9 Travel Time to Work, by Enrollment Status

(Percentage distributions)

Minutes between home and work	High school dropout	High school student	College student	Nonenrolled high school student	Total
0-5	25	46	36	24	34
6-14	18	22	23	22	22
15-29	31	23	24	36	29
30 or more	26	8	16	18	15
Total percent	100	100	100	100	100

UNIVERSE: Civilians age 14-21 on January 1, 1979 who were employed on the interview date. (N=16,222,000)

students live within 15 minutes of work. Conversely, the majority of those not in school travel 15 minutes or more to work, and trips of half an hour or more are not uncommon.

Examination of time to work cross-classified by sex and race jointly and controlling for enrollment status reveals that minorities spend more time traveling to work than whites: overall, 36 percent of whites are within 5 minutes of work compared with 22 percent of minorities, and 13 percent of whites travel 30 minutes or more to work compared with 27 percent of minorities. Sex differences in travel time are generally small, but commutes of 30 minutes of more are more prevalent among males than among females.

The fact that there are race differences in travel time to work even after controlling for enrollment status strongly suggests that jobs for youth are more conveniently located for whites than for blacks or Hispanics. This difference helps explain the greater tendency among minority youth to report that lack of transportation was a problem in getting a good job (see chapter 10). In any case, to the extent that existing jobs are more conveniently located for whites than for minorities, programs aimed at equalizing access to jobs for youth would do well to incorporate policies designed to stimulate job creation in areas where minority youth live.

Young people's attitudes toward their jobs are also of interest. Each employed respondent was asked how much opportunity the job gave her/him: 1) to do a number of different things; 2) to deal with other people; 3) for independent thought or action; 4) to develop close friendships in the job; and 5) to do a job from beginning to end. Questions were also asked about how much the job gives the respondent the feeling that: 6) the job itself is very significant or important in the broader scheme of things; and 7) he/she knows whether or not the job is being performed well or poorly. For each of these seven items a five-point response scale was used, ranging from "a minimum amount" (1) through "a moderate amount" (3) to "a maximum amount" (5).

Table 3.10 provides the mean values of responses for each of these seven items, stratified by sex, race, school enrollment status, and age. Overall, employed youth were most positive about the feedback and opportunity to do the job from beginning to end, and least positive about the variety of tasks and opportunities for independent thought or action. Sex differences in perceptions of job characteristics are generally quite small, although young women are more likely to have jobs in which they deal with other people. Whites are more positive about their jobs than minority youth for each and every characteristic; blacks and Hispanics have generally similar perceptions.

Among students, those in college are generally more positive than those in high school about their opportunities to do a number of things and to deal with people. More nonenrolled high school graduates than dropouts see their jobs as providing greater opportunities on every characteristic. Here as elsewhere, then, a clear labor market "penalty" is imposed on youth who fail to complete high school. Older youth generally perceive greater opportunities in their jobs than their younger

Table 3.10 Mean Values of Job Characteristics, by Sex, Race, Enrollment Status and Age

Job Characteristic[a]	Sex		Race			Enrollment status				Age				Total
	Female	Male	Black	Hispanic	White	High school dropout	High school student	College student	Nonenrolled high school graduate	14-15	16-17	18-19	20-22	
(1) VARIETY	2.93	2.98	2.63	2.79	2.99	2.78	2.75	2.94	3.20	2.49	2.82	2.98	3.14	2.95
(2) PUBLIC	3.65	3.40	3.23	3.25	3.56	3.17	3.40	3.65	3.67	3.11	3.45	3.57	3.63	3.52
(3) INDEPENDENCE	3.02	3.14	2.86	2.83	3.12	2.98	2.97	3.05	3.23	3.02	2.91	3.07	3.21	3.08
(4) FRIENDS	3.34	3.35	3.23	3.20	3.37	3.26	3.24	3.35	3.47	3.04	3.29	3.41	3.42	3.35
(5) WHOLEJOB	3.75	3.81	3.55	3.52	3.82	3.60	3.74	3.76	3.88	3.75	3.73	3.78	3.82	3.78
(6) SIGNIFICANCE	3.15	3.16	3.05	3.08	3.17	3.18	3.01	2.98	3.36	2.98	3.01	3.16	3.29	3.16
(7) FEEDBACK	3.77	3.77	3.58	3.59	3.80	3.66	3.71	3.78	3.85	3.63	3.70	3.79	3.83	3.77

[a] See text, pages , for a description of these characterisitics.

UNIVERSE: Civilians age 14-21 on January 1, 1979 who were employed on date of interview. (N=16,222,000) counterparts, perhaps reflecting their greater maturity and previous work experience.

Respondents were asked to indicate how well a series of statements described their jobs. Two of the statements of particular interest here were "The skills you are learning would be valuable in getting a better job" and "The chances for promotion are good." Cross-classification of responses to these statements[10] with enrollment status and with hours of work suggests that enrolled youth with part-time jobs are engaged in less skill acquisition and are more likely to be in dead-end jobs than their nonenrolled full-time counterparts. Nonenrolled high school graduates were more likely to say they were acquiring valuable skills than dropouts.

Over three-fourths of nonenrolled high school graduates and over three-fifths of dropouts agreed that they were acquiring valuable skills, and the majority of those in agreement described the statement as "very true." Among students, by contrast, the proportion in agreement was lower and the strength of agreement was distinctly weaker. Similarly, nearly half of those working fewer than 20 hours a week felt they were not acquiring skills, but nearly half of those working full-time characterized the statement as very true and another 30 percent replied "somewhat true." The majority of employed students and part-time workers did not feel that promotion opportunities in their present jobs were good, while over 60 percent of out-of-school youth and about two-thirds of full-time workers felt they had good promotion prospects.

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[10] Response categories were "very true," "somewhat true," "not too true," and "not at all true."

The two statements on skill acquisition and on promotion opportunities were part of a series of ten statements that constitute a scale designed to measure job satisfaction. With all statements phrased in a positive way, and "very true" responses scored as 4, "somewhat true" scored as 3, and so forth, the overall mean of 3.13 on the scale suggests that by and large youth are fairly well satisfied with their jobs. Examination of the means of the job satisfaction scale by age, sex, race, and enrollment status reveals surprisingly little variation. Older youth, females, and whites all have slightly higher job satisfaction scores than their younger, male, and minority counterparts; and nonenrolled high school graduates have slightly higher scores than students who in turn have higher scores than high school dropouts.

In addition to the job satisfaction scale, there was also a single global job satisfaction question: "How do you feel about the job you have now? Do you like it very much, like it fairly well, dislike it somewhat, or dislike it very much?" The overall mean response to this question was 3.14--on the "very much" side of "like it fairly well." Thus, the mean of the single global question was essentially identical to the mean of the 10-item scale. As with the scale, variation in the means by age, sex, race, and school enrollment was somewhat limited, and generally in the same direction.

Table 3.11 provides information on responses to the global

Table 3.11 Job Satisfaction, by Sex and Race

(Percentage distributions)

How do you feel about the job you have now?	Female			Male			Total
	Black	Hispanic	White	Black	Hispanic	White	
All employed youth							
Like it very much	27	31	38	25	26	33	34
Like it fairly well	56	54	48	56	56	50	50
Dislike it somewhat	13	13	11	14	14	13	12
Dislike it very much	4	2	4	5	4	4	4
Total percent	100	100	100	100	100	100	100
Mean	3.06	3.13	3.19	3.01	3.04	3.12	3.14
High school dropouts							
Like it very much	12	18	33	27	26	35	32
Dislike it somewhat or very much	24	23	13	24	16	16	16
Mean	2.69	2.90	3.18	2.96	3.04	3.14	3.10

UNIVERSE: Civilians age 14-21 on January 1, 1979 who were employed on date of interview. (N=16,222,000) job satisfaction question for all employed youth and for employed high school dropouts. For all youth the principal difference is in the division between "like it very much" and "like it fairly well": whites are somewhat more likely to opt for the former response while minority youth are more likely to choose the latter. However, in each of the six groups 80 to 85 percent of employed youth indicated that they liked their jobs and the maximum difference in means just exceeds 0.1. Among dropouts, however, the race differences are more pronounced, especially among females and particularly among blacks. Thus, while job satisfaction among youth is generally high and stable across various subgroups of the employed youth population, minority dropouts are generally less likely to be highly satisfied with their jobs and (with the exception of Hispanic males) distinctly more likely to dislike their jobs--one more piece of evidence suggestive of the difficulties faced by dropouts in the labor market.

II. WAGE STRUCTURE IN THE YOUTH LABOR MARKET

Introduction and Methodology

To examine the determinants of youth wages, and to ascertain the size of sex and race differences in the hourly wage rates of youth after controlling for these determinants, we estimated separate wage equations by sex and by school enrollment status (student/nonstudent).[11] For each of the four sex/enrollment status groups, the natural logarithm of the hourly rate of pay of employed youth was regressed on a set of explanatory variables designed to measure both personal and labor market characteristics presumed to influence wage rates. Variables used to measure personal charcteristics were the number of years of school completed,[12] the number of years since leaving school (a measure of potential postschool work experience that is available for nonstudents only), duration of employment at the current job (tenure), age, the respondent's score on a test of knowledge of the world of work, and dichotomous variables differentiating black and Hispanic respondents from whites.

Variables proxying for different labor market characteristics were also used. These included a continuous variable measuring the size of the labor force in the county of residence and dichotomous variables to identify those young workers whose wages are set by collective bargaining, those who usually work fewer than 35 hours per week, those employed in the public sector, and those who live in the Northeast, North Central, and South census regions. In addition, there are also sets of dichotomous variables representing one-digit occupation and industry groups.

The (weighted) means and standard deviations of these variables for female and male students and nonstudents are provided in Table 3.12. Wage equations were estimated for these four subsamples of the employed youth population, both with and without the occupation and industry variables.[13] Independent variables were specified linearly, so the estimated coeffients may be interpreted as measuring proportionate effects.[14]

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[11] This stratification was done on the supposition that these groups were unlikely to share a common wage structure. Sample size problems prevented further stratification by race.

[12] For students, a dichotomous variable denoting high school graduates was also used. See below for discussion.

Youth Wage Structure and Differences by Sex and Race

Estimated coefficients from weighted regressions not controlling for occupation and industry are provided in Table 3.13.[15] Among students, age and educational attainment are so highly correlated (the simple correlation coefficient is 0.8 for male students and almost 0.9 for female students) that inclusion of both variables in continuous form renders the coefficient of one or both insignificant. Conversely, excluding one of these

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[13] Those youth employed as private household workers have been excluded from the analyses reported here. On average, their wage rates are so much lower than those of other employed youth that, for example, among female students the occupational variable for private household workers "explained" fully one-third of the total variation in (the natural logarithm of) hourly wage rates.

[14] That is, for example, an estimated coefficient of +0.05 on the variable measuring educational attainment would imply that each additional year of schooling completed is associated with a 5 percent increase in the hourly wage rate, other things being equal; while a coefficient of -0.08 on the variable denoting part-time employment would indicate that, other things equal, part-time workers are paid an average of 8 percent less per hour than their full-time counterparts.

[15] Chow tests indicate that there are significant differences by sex and by enrollment status in the wage structures. The test for significance of enrollment status was done using the specification for students, since the specification for nonstudents could not be applied to those in school.

Table 3.12 Means and Standard Deviations of Variables Used in the Wage Equations, by Enrollment Status and Sex

Variable	Students				Nonstudents			
	Females		Males		Females		Males	
	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
Percent high school graduates	0.47	0.50	0.38	0.48				
Years of schooling completed	11.63	1.58	11.30	1.73	11.91	1.38	11.41	1.53
Years since leaving school	--	--	--	--	2.01	1.31	2.01	1.45
Tenure on current job (years)	0.69	0.72	0.80	0.87	0.88	0.87	0.88	0.90
Age	18.09	1.62	18.03	1.69	19.77	1.25	19.67	1.37
Knowledge of the world of work	6.74	1.70	6.75	1.95	6.72	1.83	6.68	1.93
Percent black	9.9	29.8	7.8	26.9	7.8	26.9	9.4	29.1
Percent Hispanic	4.0	19.5	5.3	22.4	5.4	22.6	6.4	24.4
Percent white	86.1	--	86.9	--	86.8	--	84.2	--
Percent covered by collective bargaining	8.6	28.1	10.3	30.4	12.7	33.4	26.4	44.1
Percent employed part-time (less than 35 hours/week)	90.5	29.3	81.9	38.5	20.3	40.2	9.5	29.4
Labor force size, county of residence (millions)	0.336	0.606	0.302	0.568	0.300	0.591	0.309	0.623
Percent employed in public sector	12.5	33.1	9.7	29.6	10.5	30.7	6.1	23.9
Region of residence:								
Percent in: Northeast	23.7	42.5	23.0	42.1	20.1	40.1	20.7	40.6
North central	33.1	47.1	34.8	47.7	32.6	46.9	33.5	47.2
South	29.5	45.6	24.8	43.2	28.4	45.1	28.9	45.3
West	13.7	--	17.4	--	19.9	--	16.9	--
Occupation group:								
Percent in:								
Professional, technical, or kindred	4.0	19.7	4.9	21.7	4.7	21.3	2.9	16.8
Managerial, administrative, sales, or clerical	53.5	49.9	20.1	40.1	53.3	49.9	11.5	32.0
Craft	0.8	8.9	8.3	27.7	1.8	13.2	21.6	41.2
Operatives or laborers (nonfarm)	7.8	26.9	30.4	46.0	16.6	37.2	50.0	50.0
Farmers and farm workers	0	0	2.9	16.8	0.5	7.1	2.4	15.4
Service or private household worker	33.9	--	33.4	--	23.1	--	11.6	--
Industry:								
Percent in:								
Agriculture	1.1	10.3	3.7	19.0	0.9	9.4	4.0	19.6
Mining	0.06	2.4	0	0	0.4	6.7	1.5	12.2
Construction	0.3	5.4	2.1	14.4	1.2	11.0	13.3	33.9
Manufacturing (durables)	2.4	15.2	4.5	20.8	8.6	28.0	23.6	42.5
Manufacturing (nondurables)	4.5	20.8	4.1	20.0	10.3	30.5	8.5	27.9
Transportation	1.0	9.9	1.6	12.7	3.6	18.7	5.2	22.3

Table 3.12 continued

Variable	Students				Nonstudents			
	Females		Males		Females		Males	
	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
Wholesale trade	1.0	9.8	2.6	15.9	1.6	12.7	3.5	18.3
Retail trade	50.7	--	47.0	--	32.9	--	20.8	--
Finance, insurance, and real estate	3.5	18.4	2.1	14.4	10.2	30.2	1.6	12.6
Business and repair services	1.6	12.5	7.0	25.6	3.0	17.1	8.8	28.4
Personal services	2.7	16.3	3.7	18.9	3.0	17.1	1.8	13.3
Entertainment	2.7	16.1	3.7	18.9	0.8	9.0	0.7	8.4
Professional and related services	26.5	44.2	15.9	36.5	19.6	39.7	3.9	19.5
Public administration	1.9	13.6	2.0	14.0	3.9	19.4	2.8	16.4
Natural logarithm of hourly wage rate (in cents)	5.68	0.31	5.71	0.36	5.85	0.31	6.06	0.36
Hourly wage rate (in cents)	307.88	102.56	322.55	122.39	366.46	132.25	459.24	180.78
Number of respondents	676		717		793		876	

Table 3.13 Wage Equations by Sex and Enrollment Status

(dependent variable = natural logarithm of hourly wage rate in cents)

Independent variables	Students				Nonstudents			
	Female		Male		Female		Male	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
High school graduate	.055	1.42	.121**	2.81	-	-	-	-
Years of schooling completed	-	-	-	-	.063**	6.95	.042**	4.98
Age	.021^{+}	1.77	.038**	3.03	-	-	-	-
Years since leaving school	-	-	-	-	.048**	5.36	.047**	5.63
Tenure on current job (years)	-	-	-	-	.013	1.04	.034**	2.72
Knowledge of the world of work	-	-	-	-	.009	1.50	.014**	2.26
Covered by collective bargaining	.118**	2.84	.122**	3.03	.142**	4.49	.302**	11.89
Employed part-time (less than 35 hours/week)	-.118**	-2.87	-.121**	-3.60	-.006	-0.25	-.070^{+}	-1.87
Size of labor force in county of residence (millions)	.021	1.06	.014	0.63	.065**	3.48	.057**	3.10
Employed in public sector	-.009	-0.24	-.139**	-3.32	.012	0.35	-.045	-0.99
Northeast region	-.084*	-2.07	.015	0.39	.093**	2.72	-.081*	-2.23
North central region	-.063^{+}	-1.65	.015	0.41	-.020	-0.63	-.046	-1.35
South region	-.111**	-2.77	-.001	-0.01	-.032	-0.96	-.073*	-2.08
West region	-	-	-	-	-	-	-	-

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Table 3.13 (continued)

Independent variables	Students				Nonstudents			
	Female		Male		Female		Male	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Black	.021	0.51	-.020	-0.43	-.031	-0.76	-.111**	-2.85
Hispanic	-.042	-0.69	.048	0.86	.008	0.17	-.058	-1.19
White	-	-	-	-	-	-	-	-
Constant	5.434**	25.27	5.076**	23.13	4.896**	43.35	5.341**	52.09
R^2	.086		.177		.147		.262	
$\overline{R}^2$	.071		.164		.133		.251	
F	5.68		13.81		10.35		23.53	
Number of observations	676		717		793		876	

$^+$Significant at the .10 level, two-tailed test.

*Significant at the .05 level, two-tailed test.

**Significant at the .01 level, two-tailed test.

variables results in a highly significant coefficient for the other. Use of a dichotomous variable differentiating high school graduates (i.e., college students) from those still enrolled in high school permitted inclusion of measures of age and educational attainment without excessive multicolinearity.

The first two regressions show a noticeable payoff among students to age, twice as great for males as for females--i.e., incorporating the different effects on wages of high school graduation, the age-wage profile is significantly steeper for male students than for female students.[16] For students working part-time in the nonunion, private sector in an urban county with a labor force of 300,000 in the West, age-wage profiles at age 16 are about ten percent higher for females.[17] However, for 18 year old graduates with these characteristics the predicted wages by sex are almost equal, and thereafter the gap between the male and female profiles widens, reaching eight percent by age 22.[18]

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[16] If either age or educational attainment alone is controlled for, the more rapid progression of wages for male students also is evident. With age, coefficients (t-values) for males and females are .064 (8.46) and .032 (4.39), respectively; with education, .052 (7.21) and .030 (4.10).

[17] Note that this marked wage advantage of young female students is apparent only in the West: in each of the other three regions, sex differences in predicted wage rates of 16 year old students are no greater than two percent. This phenomenon reflects the fact that among male students region is an insignificant determinant of wage rates and estimated regional differences are very small, while among female students wage rates are significantly associated with region and the West is clearly the high-wage region. Hence, females do best relative to males in the West.

[18] Among 22 year old students, the predicted wage advantage of males in the three non-West regions ranges from about 16 to 20 percent.

Thus, young women in school begin working in situations where they are paid wages similar to (or in the West, higher than) those of their male counterparts, but as students age (and advance from high school to college) the relative wage position of females deteriorates markedly.

For both male and female students, those whose wages are set by collective bargaining are paid a premium of twelve percent, while part-time workers are paid about twelve percent less than those who work full-time, other things equal. Wages are higher in larger urban areas, but not significantly so.[19] Among male students, public sector employees are paid significantly less than their private sector counterparts, while there is no such difference among female students. Conversely, (as already noted) there are significant regional wage differences among females (wages are lowest in the South, and significantly higher in the West than elsewhere) that are not at all present for males. Finally, race differences are all small and statistically insignificant among female and male students.[20]

For nonstudents, the wage structure and variations by sex are clearly different from those for students. The increment to wages associated with an additional year of potential work experience is about five percent for both females and males, and the wage increase associated with an increase in labor force size of one million is about six percent. In addition, public sector employment is virtually unrelated to the wages of nonenrolled youth.

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[19] Job tenure and scores on the test of knowledge of the world of work were unrelated to the wages of students, and these variables have been excluded from the student wage equations.

[20] This is true for the gross differences as well as the net differences. Particularly among females, exclusion of private household workers removes proportionately more low-wage whites, thus eliminating virtually the entire difference in mean wage rates between white and minority female students (cf. Table 3.4).

The return to educational attainment is higher for females than for males, while current job tenure is significantly related to the wages of nonenrolled young men but not young women. Likewise, knowledge of the world of work (which has often been used as a proxy for ability) is more closely linked to the wages of males than females. Collective bargaining coverage is a significant determinant of wages of both young women and young men; but at least in part as a consequence of the different occupational and industry distributions by sex (see Table 3.12), the relative premium associated with such coverage is more than twice as great for males as for females. Young men who work part-time are penalized via significantly lower wage rates, but no such difference appears among young women. Unlike the case for male students, significant regional wage differences appear among nonenrolled males, with wages highest in the West, and lowest in the South and Northeast, other things equal. Among nonenrolled females, by contrast, wage rates are highest in the Northeast and lowest in the South.

Race and sex differences in hourly wage rates are distinctly more evident among nonstudents than among students. Among males, the wages of blacks are significantly lower than those of whites by an average of more than eleven percent, other things equal.

Since the corresponding gross difference is just over fourteen percent, the black-white differences in the values of the explanatory variables must account for between one-fifth and one-fourth of the gross black-white difference in mean wage rates.[21] The hourly wage of Hispanic males averages six percent less than that of white males, other things equal; and this difference is not statistically significant. Taking the coefficient for Hispanic males as the best point estimate of the net Hispanic-white wage difference, and given that the corresponding gross difference is just over eight percent, it may be said that Hispanic-white differences in the values of the explanatory variables account for almost thirty percent of the gross Hispanic-white difference in mean wage rates. Examination of the means of the explanatory variables separately by race (not shown here) indicates that the key factor underlying the observed gross differences is educational attainment: while whites average 11.6 years of school completed, the corresponding figures for blacks and Hispanics are 11.1 and 9.8, respectively.

Among nonenrolled females, there are no significant differences by race in either the net or the gross differences (all of these differences fall within a range of plus or minus three percent). There are, however, marked differences by sex in hourly wage rates, even after controlling for the explanatory variables used in the wage equations. These differences are illustrated by the data in Table 3.14, which show the predicted wage rates for six hypothetical "typical" nonenrolled youth who are alike in all respects but sex and race. As previously noted, race differences within sex groups are generally insignificant and small (with the exception of black males); however, there are quite large sex differences within each race group, amounting to wage premiums for males of 20 to 25 percent or more. Thus, among nonenrolled youth, it appears that the substantial difference in hourly earnings between young men and young women stems not from sex differences in the attributes that these youth bring to the labor market, but rather from sex differences in the wage structure.[22]

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[21] That is, for the nonenrolled males for whom the wage equation was estimated, the (weighted) mean value of the natural logarithm of the hourly wage was 6.080 for whites and 5.938 for blacks--a difference of 0.142 (the gross difference, since other factors are not being held equal). Controlling for educational attainment, potential postschool work experience, and the other variables included in the equation in Table 3.13, the black-white difference shrinks to 0.111. Thus, 22 percent of the gross difference (0.031 divided by 0.142) is eliminated once these other determinants of the hourly wage are controlled for.

One final point to be noted about sex differences in wage rates is the implied variation by region in these differences. The data in Table 3.14 refer to youth from the West (the reference region in the wage equations). If such predicted wage rates were calculated for youth in the South or North Central regions, the sex differences in wages would be about 75 to 80 percent of those shown in the table--i.e., slightly smaller but

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[22] A glance at the coefficients in Table 3.13 reveals major sex differences in the coefficients for nonenrolled youth: for educational attainment (in favor of females), and for job tenure, collective bargaining coverage, and the intercept (all in favor of males). The difference in intercept terms may be viewed as reflecting the effects of omitted variables and/or discrimination, and it is the major factor underlying the differences shown in Table 3.14.

Table 3.14 Predicted Hourly Wage Rates for "Typical" Nonenrolled Youth, by Sex and Race[a]

(in dollars)

Sex	Black	Hispanic	White
Female	3.34	3.48	3.45
Male	3.94	4.16	4.41

[a] The values in the table represent the antilogarithms of the predicted natural logarithm of the hourly wage rate for youth with 12 years of school completed, 2 years of potential postschool work experience, 1 year of job tenure, a score of 7 on the test of knowledge of the world of work, and employed full-time in the nonunion, private sector in an urban labor market of 300,000, in the West. For each sex, the predicted wage is based on the coefficients of the corresponding wage equation.

still quite large. However, in view of the opposing signs of the coefficients for residents of the Northeast, predicted wage rates for male and female youth in the Northeast would be much closer. Thus, for example, if the predicted wage rates in Table 3.14 had been for residents of the Northeast, the values for white males and females would have been $4.07 and $3.79, respectively (representing a wage premium for males of less than 10 percent).

Occupation and Industry as Additional Determinants of Youth Wages

Table 3.15 provides estimated coefficients for the wage equations, controlling for industry and occupation group. Among students, introduction of the industry and occupation variables results in small changes in the coefficients of the variables used in the preceding wage equations. For both sexes, however, the variables that had been significant earlier tend to remain so, and those that had been insignificant generally are still insignificant.

Relative to their counterparts employed in service occupations, male students in professional and technical jobs were paid significantly more while those employed as farm workers were paid considerably less, other things equal. Among female students, those in managerial, administrative, sales, and clerical occupations (of whom less than 2 percent were in managerial and administrative positions and roughly three-fourths were in clerical occupations) were paid approximately seven percent less per hour than their service job counterparts.

Table 3.15 Wage Equations by Sex and Enrollment Status, Controlling for Occupation Group and Industry

(dependent variable = natural logarithm of hourly wage rate, in cents)

	Students				Nonstudents			
	Female		Male		Female		Male	
Independent variables	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
High school graduate	.065+	1.66	.123**	2.82	-	-	-	-
Years of schooling completed	-	-	-	-	.057**	6.11	.039**	4.88
Age	.021+	1.71	.034**	2.70	-	-	-	-
Years since leaving school	-	-	-	-	.045**	5.08	.035**	4.46
Tenure on current job (years)	-	-	-	-	.022+	1.79	.049**	4.10
Knowledge of the world of work	-	-	-	-	.007	1.14	.018**	3.06
Percent covered by collective bargaining	.122**	2.89	.098*	2.41	.136**	4.23	.247**	9.55
Percent employed part-time (less than 35 hours/week)	-.067	-1.52	-.079*	-2.21	.034	1.30	-.001	-0.02
Labor force size, county of residence (millions)	.026	1.28	.009	0.42	.070**	3.75	.063**	3.63
Percent employed in public sector	.020	0.47	-.108*	-2.11	-.033	-0.73	.019	0.33
Region of residence:								
Percent in: Northeast	-.075+	-1.82	.024	0.60	.077*	2.26	-.063+	-1.80
North central	-.050	-1.29	.018	0.50	-.033	-1.07	-.060+	-1.85
South	-.102*	2.51	.006	0.15	-.021	-0.64	-.105**	-3.18
West	-	-	-	-				
Percent black	.026	0.64	-.021	-0.45	-.033	-0.83	-.066+	-1.81
Percent Hispanic	-.032	-0.53	.043	0.77	-.006	-0.12	-.038	-0.84
Percent white	-	-	-	-				
Occupation group:								
Percent in: Professional, technical or kindred	-.006	-0.10	.135*	2.17	.195**	3.46	.069	1.00
Managerial, administrative, sales or clerical	-.069**	-2.60	-.018	-0.52	-.050+	-1.73	.009	0.19
Craft	.035	0.25	.058	1.10	-.113	-1.36	.073+	1.71
Operatives or laborers (nonfarm)	-.033	-0.60	.048	1.50	-.100*	-2.45	.004	0.11
Farmers and farm workers	-	-	-.246	-1.61	-.265	-1.23	-.214*	-2.16
Service workers	-	-	-	-	-	-	-	-
Industry:								
Percent in: Agriculture	.005	0.04	.067	0.50	.257	1.58	.045	0.59
Mining	.518	1.07	-	-	.357*	2.34	.434**	5.01
Construction	-.134	-0.63	.102	1.15	.029	0.31	.258**	6.34

Table 3.15 (continued)

Independent variables	Students				Nonstudents			
	Female		Male		Female		Male	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Manufacturing (durables)	.182*	2.14	.115+	1.77	.232**	5.19	.209**	5.79
Manufacturing (nondurables)	.091	1.35	.127*	2.04	.144**	3.56	.092*	2.07
Transportation	.163	1.37	.288**	2.93	.143*	2.46	.121*	2.34
Wholesale trade	.284*	2.36	.073	0.94	.121	1.47	-.008	-0.14
Retail trade	-	-	-	-	-	-	-	-
Finance, insurance and real estate	.043	0.66	.154+	1.77	.068+	1.77	.002	0.02
Business and repair services	.080	0.86	.009	0.17	.036	0.59	-.035	-0.82
Personal services	.065	0.89	.057	0.87	-.063	-1.02	-.016	-0.20
Entertainment	-.047	-0.65	.019	0.29	-.308**	-2.61	.143	1.17
Professional and related services	-.027	-0.81	-.058	-1.39	.028	0.84	-.117+	-1.95
Public adminstration	.089	0.96	.004	0.04	.168*	2.41	.077	0.92
Constant	5.405	24.63	5.074	22.87	4.953	42.43	5.246	52.02
R^2	.122		.230		.223		.383	
$\overline{R}^2$	.084		.199		.191		.360	
F	3.22		7.35		7.03		16.90	
		2		1				
Number of respondents	676		717		793		876	

Relative to those employed in retail trade, male students in manufacturing and in transportation are paid significantly higher wage rates, other things equal. Among female students, hourly wage rates are signifiantly higher for the small proportions employed in durable goods manufacturing and in wholesale trade. Because almost no other significant industry wage differentials appear, industry and occupational assignments do not constitute very important determinants of wages among students.

Among nonenrolled youth, on the other hand, industry and occupation are quite significantly related to hourly wages in a number of cases. In addition, controlling for occupation and industry results in some interesting changes in the coefficients of the variables previously considered. Female nonstudents in professsional and technical occupations are paid roughly 20 percent more than their counterparts in service occupations, other things equal, while those employed in clerical and in blue-collar jobs are paid about 5 and 10 percent less, respectively, on average. Hourly wage rates are highest for those nonenrolled females employed in durable goods manufacturing and mining, followed by those employed in nondurable goods manufacturing, transportation, public administration, and--to a lesser degree--finance, insurance, and real estate. While young females in these industries are paid significantly more than those in retail trade (by anywhere from 7 to 25 percent or more), females employed in entertainment and recreation services are paid significantly and substantially less, other things equal.

Among males not in school there are two significant occupational coefficients: relative to those in service occupations, males in craft jobs are paid a wage premium of about 7 percent while those working as farmers or farm laborers are paid approximately 20 percent less, other things equal.[23] Nonenrolled males employed in mining, construction, and durable goods manufacturing are paid 20 to 25 percent or more above what their counterparts in retail trade are paid, other things equal, while smaller (but significant) premiums are received by males employed in transportation and in nondurable goods manufacturing. Finally, males employed in professional and related services are paid significantly less than those in retail trade.

Among female nonstudents, controlling for occupation and industry leads to only minor changes in the coefficients of the variables previously controlled for. The small reduction in the impact on wages of educational attainment means that part of the effect of this variable on wages operates via differing occupational and industrial assignments by education. Similarly, the reduction in the wage premium associated with residence in the Northeast reflects an industrial structure there in which high-wage industries are disproportionately represented.

Comparison of the short-form and long-form wage equations for nonenrolled males reveals that in moving from the former to the latter there are modest declines in the magnitudes of the coefficients of educational attainment and potential postschool work experience, an increase in the coefficient of tenure, and slight changes in the pattern of wage differences by region, other things equal. Most notable, though, are the changes in two coefficients: those for collective bargaining coverage and for blacks. The decline in the size of the collective bargaining coefficient confirms the suggestion made above that part of the very large coefficient in the short-form equation stems from a (relatively high) concentration of nonenrolled male youth in high-wage, more heavily unionized industries. At the same time, however, even after controlling for industry and occupation the relative premium associated with collective bargaining coverage for males remains almost twice as large as that for females.

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[23] Since most youth employed in this occupational group are also in the agricultural industry group, it is more meaningful to consider both the occupation and the industry coefficients for agriculture in evaluating the wages of youth employed in this sector.

There is a 40 percent reduction in the coefficient for being black in moving from the short-form to the long-form equation, with a concomitant decline in the level of significance of the coefficient. Thus, a good portion of the unexplained black/white difference in wage rates from the short-form equations can be attributed to racial differences in the distribution of employment by occupation and industry. More specifically, examination of the separate occupation and industry distributions of blacks and whites (not shown here) reveals that the reduction in the magnitude of the coefficient for blacks may be traced primarily to their underrepresentation (relative to whites) in the durable goods manufacturing, construction, and mining industries as well as in craft occupations.[24] While some portion of this racial difference in occupation and industry mix may stem from differences in educational attainment--24 percent of nonenrolled white males did not complete high school compared to 40 percent of blacks--it seems plausible to suggest that part of the difference may also stem from differences by race in the ease of access to high-paying occupations and industries. To the extent that this is true, it implies that a portion of the reduction in the coefficient for blacks represents "explaining away" one form of discrimination (in wages) by using another form (in employment).[25]

To summarize, there is a gross difference in wages between black and white nonenrolled males amounting to about 14 percent. In the short-form equations this difference shrinks to about 11 percent, and in the long-form equations it diminishes further to about six and a half percent. Thus, differences between blacks and whites in educational attainment and the other factors controlled for in the short-form equations account for almost 25 percent of the gross difference. Further controls for occupation and industry, in conjunction with those factors already considered, account for almost 55 percent of the gross racial difference in the average (of the natural logarithm of the) hourly wage. As before, there are no significant differences between the wages of Hispanic males and those of white males, other things equal; nor are there any significant differences by race in the wages of nonenrolled female youth.

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[24] The largest industry difference is in durable goods manufacturing, which employs 25 percent of nonenrolled white males and 15 percent of nonenrolled black males. Similarly, 23 percent of whites work in craft jobs compared to 14 percent of blacks.

[25] For an excellent discussion of this notion, see Oaxaca (1973). In any case, examination of the reasons underlying the differing occupation and industry distributions by race would appear to be a study worth pursuing.

The results here concerning both the size and significance of black/white wage differences among nonenrolled male youth appear to conflict somewhat with findings of others that wage differences among male youth are small and insignificant.[26] While there are a variety of possible explanations for this apparent conflict, the analyses here indicate that the wage structure for nonenrolled youth differs in important ways from that for students. Consequently, failure to distinguish between these two groups may lead to estimates which do not provide an accurate picture of racial wage differences either among students or among nonstudents.

Substantial sex differences in the average hourly rates of pay of nonenrolled youth persisted, even after controlling for the variables considered in the short-form wage equations. Controlling for occupation and industry, the size of male/female wage differences, other things equal, depends on the values at which these "other things" are set equal. For example, consider two hypothetical nonenrolled white youth with twelve years of schooling, two years since leaving school, one year of job tenure, a score of seven on the test of knowledge of the world of work, and employed full-time in the nonunion, private sector in an urban county with a labor force of 300,000 in the West. Depending on the assumptions made regarding occupation and industry, the difference between the predicted wage of a young woman and that of a comparable young man may be quite large or relatively small. The wage equations imply that two such "typical" youth employed as service workers in retail trade would be paid $3.37 and $3.95 per hour (female and male, respectively), while two comparable individuals employed as operatives in durable goods manufacturing would receive hourly wages of $3.84 and $4.88, respectively.[27]

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[26] For example, see the discussion and references in Freeman (1980: 20-21).

While these data indicate the importance of occupation and industry for youth wage rates, they do not provide an indication of the overall effect of the sex differences in occupation and industry distributions. Evaluating this effect is complicated by what is essentially an index-number problem: either the coefficients for females or the coefficients for males can be used to evaluate these differences, and these two sets of coefficients will sometimes give rather diverse estimates. In the case of industry this is not a problem because the industrial wage structures for the two sexes are fairly similar.[28] The data indicate that if nonenrolled females and males had identical industry distributions, the female/male wage ratio would be higher by 4 to 8 percentage points, or roughly one-fourth to one-third of the overall (gross) wage gap between nonenrolled females and males.

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[27] In the case of unionized durable goods manufacturing, the figures would rise to $4.40 for females and $6.25 for males.

[28] For example, other things equal, retail trade is a relatively low-wage industry while manufacturing and transportation are high-wage industries.

In the case of occupation, the index-number problem becomes more serious, due to the sharply differing occupational wage structures by sex.[29] Hence, if females and males had the same occupational distribution, the coefficients from the female wage equation imply that the wage gap would widen by 4 percentage points, while the male coefficients imply a 1 percentage point reduction in the gap. Thus, although this analysis supports the notion that industrial segregation by sex makes an important contribution to generating sex differences in average hourly wage rates, the same cannot be said for occupational segregation. This latter finding seems somewhat anomalous next to the considerable literature on the importance of occupational sex segregation for male/female earnings differences. However, both the crude manner in which occupation is controlled for as well as the youthfulness of the sample may account for the failure to find an important effect of occupational segregation.[30]

III. SUMMARY AND CONCLUDING COMMENTS

This latter section of the chapter has examined the determination of wages in the youth labor market, with emphasis on differences by sex and race. Analyses were conducted separately for students and nonstudents, and with and without controls for occupation and industry. Among students, wage differences by sex and race were small and insignificant. Among nonenrolled youth there was one significant race difference between white and black males. The 14 percent gross difference between the two races diminished by almost one-fourth when factors other than occupation and industry were controlled for, and inclusion of occupation and industry reduced the net difference further to about 6 and one-half percent. Sex differences in the wage rates of nonenrolled youth are even more substantial (in excess of 20 percent in favor of males), and apart from the fourth or third of the difference in average wages that can be attributed to differing industry distributions by sex, these sex differences are not readily accounted for by corresponding differences in those characteristics that influence wage rates.[31]

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[29] Among females, those in service occupations are paid more than those in all other occupation groups except professional and technical workers; while among males, those employed in service jobs are paid less than those in all other nonfarm occupations.

[30] The implication here is that occupational wage differences will likely change as youth age and acquire more occupation-specific skills.

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[31] A potential methodological problem has been ignored to this point--the problem of selectivity bias. As a number of authors have noted (Gronau, 1973; Heckman, 1976), wage comparisons between groups with divergent rates of participation in the labor force risk introducing a selectivity bias. This problem is clearly relevant here with regard both to sex and to race, and the failure to confront it directly must be acknowledged as a shortening of the analysis. However, in a more optimistic vein, it may be noted that a recent attempt (Kim, 1980) to explicitly account for this selectivity bias problem (using an approach suggested in Heckman, 1976) with these 1979 NLS data found in general no great differences between wage equations estimated using ordinary least squares and comparable equations which explicitly took account of the potential selectivity bias problem.

Chapter 3 Glossary

AGE
A continuous variable measuring the age of the respondent (in years) as of the date of interview.

AGRICULTURE
See "industry."

BLACK
See "race."

BUSINESS AND REPAIR SERVICES
See "industry."

CONSTRUCTION
See "industry."

COVERED BY COLLECTIVE BARGAINING
A binary variable coded 1 if the respondent's wages at the CPS job are set by collective bargaining.

CRAFT
See "occupation."

EMPLOYED IN PUBLIC SECTOR
A binary variable coded 1 if the respondent's CPS job is with the federal, state or local government.

EMPLOYED PART-TIME
A binary variable coded 1 if the respondent usually works less than 35 hours per week at the CPS job.

ENROLLMENT STATUS
Combines whether the respondent was enrolled in regular school on May 1, 1979 or the interview date, whichever came first, with whether the respondent had completed 12th grade (or received a high school diploma or GED) at that date. Categories are not enrolled and did not complete 12th grade, enrolled and did not complete 12th grade, enrolled and completed 12th grade, and not enrolled and completed 12th grade.

ENTERTAINMENT
See "industry."

FARMERS AND FARM WORKERS
See "occupation."

FEEDBACK
See "job characteristics."

FINANCE, INSURANCE AND REAL ESTATE
See "industry."

FRIENDS
See "job characteristics."

HIGH SCHOOL GRADUATE
A binary variable coded 1 if the respondent had completed 12th grade (or received a high school diploma or GED) as of May 1, 1979 or the interview date, whichever came first.

HISPANIC
See "race."

HOURLY RATE OF PAY
Usual gross rate of compensation per hour at the CPS job.

INDEPENDENCE
See "job characteristics."

INDUSTRY
Industry or business in which the employer for the respondent's CPS job is engaged, classified using 1970 Census codes. Categories are agriculture, forestry and fisheries; mining; construction; manufacturing (durable goods); manufacturing (nondurable goods); transportation; communication and public utilities; wholesale trade; retail trade; finance, insurance and real estate; business and repair services; professional and related services; and public administration. For the regression analysis, 14 binary variables were created. Each is coded 1 if the CPS job is in that business or industry and 0 otherwise.

JOB CHARACTERISTICS
A series of 5 questions was asked about the opportunities the respondent feels the CPS job provides. Specifically, the questions deal with opportunities to do a number of different things to deal with other people, for independent thought or action, to develop close friendships, and to do a job from beginning to end. Also, the respondent is asked how much feedback the CPS job provides and how significant the job is. The answers to all seven questions are coded a minimum amount, not too much, a moderate amount, quite a lot, and a maximum amount.

JOB SATISFACTION
The respondent's overall satisfaction with the CPS job. Categories are dislike it very much, dislike it somewhat, like it somewhat, and like it very much.

KNOWLEDGE OF THE WORLD OF WORK
The actual number of correct responses to a series of questions about the type of work done in an occupation. Each question is in a multiple choice format with 3 possible answers.

LABOR FORCE SIZE, COUNTY OF RESIDENCE
Size of the civilian labor force in the county 16 years old and over, as of 1970. Expressed in thousands.

LIFE INSURANCE
A binary variable coded 1 if the CPS employer makes available life insurance that would cover death for reasons not connected with the job.

MANAGERIAL, ADMINISTRATIVE, SALES OR CLERICAL
See "occupation."

MANUFACTURING (DURABLE)
See "industry."

MANUFACTURING (NONDURABLE)
See "industry."

MEAN WAGE RATES
See "hourly rate of pay."

MEDICAL INSURANCE
A binary variable coded 1 if the CPS employer makes available medical, surgical or hospital insurance that covers injuries or major illnesses off the job.

MINING
See "industry."

NORHTEAST
See "region of residence."

NORTH CENTRAL
See "region of residence."

OCCUPATION
Occupation of the respondent in the CPS job, classified using 1970 Census codes. Categories are professional, technical and kindred workers; managers and administrators, except farm; sales workers, clerical and kindred workers; craftsmen and kindred workers; operatives, except transport; transport equipment operatives; laborers, except farm; farmers and farm managers; farm laborers and farm foremen; service workers, except private household; and private household workers. For regression analysis, 6 binary variables are created consisting of professional; managerial, administrative; sales and clerical; crafts; laborers and operatives; farmers and farm workers; and service workers. Each is coded 1 if the CPS job is in that occupational category and 0 otherwise.

OPERATIVES OR LABORERS (NONFARM)
See "occupation."

PAID VACATION

A binary variable coded 1 if the CPS employer makes available paid vacations.

PERSONAL SERVICES
See "industry."

PROFESSIONAL AND RELATED SERVICES
See "industry."

PROFESSIONAL, TECHNICAL OR KINDRED
See "occupation."

PUBLIC
See "job characteristics."

PUBLIC ADMINISTRATION
See "industry."

RACE
The race and ethnicity of the respondent based on the race and ethnicity of the respondent's parents. The categories are Hispanics, non-Hispanic blacks, and non-Hispanic nonblacks. These are usually referred to as Hispanics, blacks and whites. For regression analysis, 3 binary variables were created. Each is coded 1 if the respondent is in that race or ethnic group and 0 otherwise.

REGION OF RESIDENCE
The Census region in which the respondent lived at the time of the interview. Categories are Northeast, North Central, South and West. For regression analysis, 4 binary variables have been created. Each is coded 1 if the respondent lived in the region being represented and 0 otherwise.

RETAIL TRADE
See "industry."

SERVICE OR PRIVATE HOUSEHOLD WORKER
See "occupation."

SEX
The sex of the respondent.

SEX AND RACE
The respondent's sex and race combined. Categories are Hispanic females, black females, white females, Hispanic males, black males, and white males.

SIGNIFICANCE
See "job characteristics."

SOUTH
See "region of residence."

TENURE ON CURRENT JOB
Actual number of years the respondent has worked at the CPS job, excluding periods when the respondent was not working for or being paid by the employer.

TRANSPORTATION
See "industry."

TRAVEL TIME TO WORK
Actual number of minutes it usually takes the respondent to get *from* home *to* work.

USUAL HOURS WORKED
Actual number of hours the respondent usually works weekly at the CPS job.

VARIETY
See "job characteristics."

WEST
See region of residence."

WHITE
See "race."

WHOLEJOB
See "job characteristics."

YEARS OF SCHOOL COMPLETED
Actual number of years of schooling the respondent reports having completed and gotten credit for as of the date of the interview. Years of college completed are denoted 13, 14, 15, etc.

YEARS SINCE LEAVING SCHOOL
Actual number of years since the respondent was last enrolled in regular school.

Chapter 3 References

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CHAPTER 4

YOUTH EMPLOYMENT PATTERNS AND JOB TURNOVER

by David Shapiro

I. PATTERNS OF YOUTH EMPLOYMENT IN 1978

Extensive data were gathered on jobs held since January 1, 1978, permitting creation of detailed work histories for respondents employed since that date. The focus here is on the number of jobs held and number of weeks worked during calendar 1978. The analysis is restricted to those youth who had reached age sixteen as of the beginning of the year.

Table 4.1 shows the distribution of weeks worked and jobs held during 1978 cross-classified by a variable measuring school enrollment status and educational attainment in 1978 and by sex.[1] Overall, about 15 percent of youth aged 16 to 20 at the beginning of 1978 did not work in the labor market during the year[2] while over 40 percent of this group worked for more than three-fourths of the year and fully 25 percent worked all year round. More than 45 percent of the youth held but one job during the year, while over 25 percent held two jobs and 13 percent held three or more jobs.

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[1] Three enrollment status groups can be identified: those not enrolled through the year, those who left school during the year, and those who were enrolled throughout the year. Each of the first two groups can be further divided into dropouts and high school graduates, while three groups of students can be identified: those who were high school students, those who completed high school and began college, and thowe who were college students.

[2] Private household workers are excluded from this analysis. They represent less than 5 percent of the sample.

Table 4. 1 Weeks Worked and Jobs Held in 1978, by Enrollment Status, Educational Attainment and Sex
(Percentage distributions)

Work experience in 1978	Not enrolled in 1978				Left school in 1978				Enrolled throughout 1978						Total
	(1) High school dropouts		(2) High school graduates		(3) Dropped out		(4) Graduated		(5) High school student		(6) Completed high school, began college		(7) College student		
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
Did not work	40	11	16	3	31	12	9	5	24	18	15	9	13	8	15
Worked 1-13 weeks	16	10	8	3	19	14	10	6	20	17	16	22	14	17	13
1 job	15	7	6	2	18	12	8	4	17	15	13	19	11	16	11
2 jobs	1	3	2	1	1	2	1	1	3	2	3	2	2	1	2
3 or more jobs	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
Worked 14-39 weeks	26	28	19	15	32	37	37	38	33	32	42	41	36	45	31
1 job	12	13	9	6	13	9	20	20	17	15	19	20	17	20	15
2 jobs	8	7	7	6	12	12	13	12	13	13	14	12	14	19	11
3 or more jobs	5	8	2	3	6	16	4	6	3	4	8	9	5	6	5
Worked 40-49 weeks	5	18	13	17	10	16	14	16	7	9	6	8	13	9	12
1 job	3	6	4	8	5	3	4	2	4	3	2	1	3	1	4
2 jobs	2	6	5	6	1	4	3	5	2	3	3	4	6	4	4
3 or more jobs	1	5	4	4	4	8	6	9	2	4	2	3	5	4	4
Worked 50-52 weeks	13	33	44	62	8	21	30	35	14	24	22	21	23	21	29
1 job	7	19	28	42	2	7	15	15	6	14	11	11	13	12	17
2 jobs	5	9	11	16	2	4	10	12	7	7	7	7	7	5	9
3 or more jobs	1	6	5	5	4	10	5	7	1	2	4	3	3	4	4
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mean jobs held	0.98	1.65	1.37	1.56	1.21	1.86	1.57	1.81	1.17	1.32	1.45	1.54	1.57	1.57	1.44
Mean weeks worked	16.7	33.4	34.6	44.4	17.6	29.2	32.5	35.5	20.7	25.9	26.9	27.2	28.4	28.0	29.6

UNIVERSE: Civilians age 16 to 20 on January 1, 1978. (N=20,641,000)

The greater the number of weeks worked during the year, the greater the likelihood the youth held more than one job, except among those who worked all year long.

School enrollment/attainment status strongly influences employment patterns. Dropouts are about two and a half times more likely than graduates not to have worked in 1978, while students in college at the end of the year are almost twice as likely to have worked as high school students. Students are likely to work for three quarters or less, while graduates are generally least likely to do so. Graduates manifest greater employment activity than dropouts, and differences between the two groups widen as the duration since leaving school increases. In addition, working on more than one job is most prevalent among school leavers (more so for dropouts than for graduates[3]), presumably reflecting the job shopping and high turnover associated with the transition from school to work. Finally, college students are also more likely than high school students to work longer and hold more than one job during the year.

Table 4.1 indicates that sex differences in patterns of youth employment are closely linked to enrollment/attainment status. Among pre-1978 dropouts, almost 40 percent of females did no work at all compared to just over 10 percent of males, while fewer than 20 percent of females worked for more than three-fourths of the year compared to about 50 percent of males. Sex differences are also apparent among pre-1978 graduates, but they are generally much smaller than the differences among dropouts. A similar pattern of sex differences by educational attainment is evident among those who left school during 1978, although these differences are smaller than among those who left school before 1978.

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[3] Among school leavers during 1978, more than one-fourth of the dropouts and almost one-fifth of the graduates held three or more jobs (compared to about one-eighth of all youth).

Among students, females are only slightly more likely than males not to have worked during 1978. Nearly a third of males in high school worked for more than three-fourths of the year, compared to just over a fifth of females. However, among students who finished high school and began college in 1978 there is almost no difference in the proportions working forty weeks or more, and among college students women are more likely than men to have worked that long.

If these cross-sectional sex differences provide a reasonably accurate longitudinal picture as well, the implication is that sex differences in youthful employment experience are strongly related to enrollment/attainment status. Male youth in high school are more likely to be employed and to work longer than their female counterparts. For those youth who leave school prior to graduation, this difference increases. There are sharp sex differences in post-school work experience, and it appears that these differences widen over time.[4] Female and male youth who finish high school initially have similar employment patterns, regardless of whether or not they go on to college. As time goes by, however, nonenrolled female graduates begin to manifest weaker employment records while females in college show the same number of weeks worked as male college students.

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[4] One factor contributing to the existence and widening of these differences over time is pregnancy--i.e., many female dropouts have left school because they were pregnant.

To the extent that student work experience contributes to post-school success in the labor market,[5] the relative status of young women in the labor market will be associated with their educational attainment. Women may be expected to fare worse relative to men among those who have dropped out of high school; among college graduates the relative position of women in the market should be distinctly improved.

Table 4.2 provides data on patterns of youth employment in 1978 by sex and race jointly. A number of noteworthy differences appear. Overall, young women are about twice as likely as young men not to have worked, and distinctly less likely (particularly among minorities) to have worked all year long. Minority females are twice as likely as whites not to have worked, and only about half as likely to have worked throughout the year. Among males, Hispanics are more than twice as likely and blacks are three times as likely as whites not to have worked during 1978. Conversely, whereas almost half of white males worked for more than three-fourths of the year, the corresponding percentages for Hispanics and blacks were slightly over 40 and about 30, respectively. Overall, then, as measured by the average number

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[5] This hypothesis has been advanced recently by Wise and Meyer (1980) and by Stephenson (1980).

Table 4.2 Weeks Worked and Jobs Held in 1978, by Sex and Race

(Percentage distributions)

Work experience, 1978	Females			Males			Total
	Black	Hispanic	White	Black	Hispanic	White	
No work	34	34	17	23	17	8	15
Worked 1-13 weeks	19	16	13	18	14	11	13
One job	17	14	11	16	12	9	11
Two jobs	2	2	2	2	1	2	2
Three or more jobs	0	0	0	0	0	0	0
Worked 14-39 weeks	27	22	31	29	27	33	31
One job	16	12	15	14	15	15	15
Two jobs	9	9	12	11	8	12	11
Three or more jobs	2	2	5	4	4	6	5
Worked 40-49 weeks	5	10	11	9	11	13	12
One job	1	3	4	4	4	4	4
Two jobs	3	5	3	4	6	5	4
Three or more jobs	1	3	4	2	2	5	4
Worked 50-52 weeks	14	17	28	21	31	35	29
One job	10	10	15	15	18	20	17
Two jobs	3	5	9	4	10	10	9
Three or more jobs	1	2	4	2	3	5	4
Total percent	100	100	100	100	100	100	100
Mean jobs held	0.95	1.06	1.42	1.24	1.33	1.62	1.44
Mean weeks worked	17.9	20.7	29.0	23.8	29.5	33.9	29.5
Total number (thousands)	1,490	670	8,400	1,300	620	8,160	2,040

Universe: Civilians age 16 to 20 on January 1, 1978. (N=20,641,000)

of weeks worked and jobs held, work activity is greatest among white males, followed by white females and Hispanic males, then by black males, with Hispanic and finally black females manifesting the weakest employment record.[6]

The differences by sex and race in patterns of youth employment reflect, at least in part, corresponding differences in the distributions across enrollment/attainment status groups. That is, to the extent that minority youth are disproportionately likely to have been school dropouts, they will suffer from adverse employment experience relative to whites. To get a better idea of the net effects of sex and race, it is thus desirable to eliminate enrollment/attainment status as a factor contributing to sex and race differences in youth employment patterns. In order to do this, tables have been prepared showing three key aspects of employment experience and simultaneously controlling for sex, race, and enrollment/attainment status.

Table 4.3 shows the percentages of youth in the various sex-race-enrollment/attainment groups who remained jobless throughout 1978. For each sex and enrollment/attainment group, minority youth show higher rates of joblessness than their white counterparts, without exception. Among males, as noted above, Hispanics are almost two and one half times and blacks three times as

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[6] In an earlier analysis of sex and race differences in work experience in 1978, younger youth (ages 14 and 15) were included, and the racial differences in patterns of youth employment were not as sharp as those reported here. This suggests that prior to age 16 work attachment is weak for all race groups, but as youth reach age 16 whites tend to enter employment much more quickly than minority youth.

Table 4.3 Percentages Not Employed During 1978, by Sex, Race, Enrollment Status, and Educational Attainment

Enrollment status and educational attainment, 1978	Female			Male			Total
	Black	Hispanic	White	Black	Hispanic	White	
Not enrolled							
High school dropouts	56	52	34	22	14	7	26
High school graduates	23	18	15	6	14	2	10
Left school during year							
Dropped out	35	55	25	28	16	6	20
Graduated	23	9	6	15	7	4	7
Enrolled throughout year							
High school student	42	36	20	34	23	14	21
Completed high school, began college	28	26	12	23	14	7	12
College student	19	23	13	14	25	7	11
Total	34	34	17	22	17	7	15

UNIVERSE: Civilians age 16 to 20 on January 1, 1978. (N=20,641,000)

likely as whites not to have been employed during the year. The differences are slightly smaller among high school students, but for almost all other groups Hispanics are at least twice as likely and blacks at least three times as likely to have remained jobless in 1978. The overall percentage of minority females without employment was twice as great as that for white females. Within enrollment/attainment groups, this race differential is frequently smaller, although it remains quite apparent.

Data on the average number of weeks worked in 1978 (Table 4.4) present a similar picture. Within each sex and enrollment/attainment group, the mean number of weeks worked is almost always greatest for whites, and usually least for blacks.[7] Among students, differences by race are greatest for those in high school, while among nonenrolled youth such differences are generally most evident for dropouts.[8] The data on both joblessness and weeks worked thus indicate that there are substantial differences by sex and race in patterns of youth employment, even after controlling for enrollment/attainment status.

The percentages of youth who held more than one job during 1978 also varies by race; whites are consistently more likely than their minority counterparts to have engaged in multiple

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[7] Those means are not restricted to youth who worked in 1978, and hence incorporate the effects of youth joblessness. Means confined to employed youth are reported in Section III below.

[8] Exceptions to this latter statement are apparent for recent black female dropouts and for earlier Hispanic male dropouts.

Table 4.4 Mean Number of Weeks Worked in 1978, by Sex, Race, Enrollment Status, and Educational Attainment

Enrollment status and educational attainment, 1978	Female			Male			Total
	Black	Hispanic	White	Black	Hispanic	White	
Not enrolled							
High school dropouts	8	14	19	25	36	36	25
High school graduates	26	33	36	38	36	46	39
Left school during year							
Dropped out	19	12	18	17	28	33	24
Graduated	21	30	35	32	33	36	34
Enrolled throughout year							
High school student	13	16	23	16	21	28	24
Completed high school, began college	22	19	28	16	30	28	27
College student	23	24	29	24	26	28	28
Total	18	21	29	24	30	34	30

UNIVERSE: Civilians age 16 to 20 on January 1, 1978. (N=20,641,000)

jobholding. This phenomenon is associated with the greater number of weeks worked by whites. There is no support here for the notion that the lower number of weeks worked by minority youth stems from greater mobility between jobs on their part.

II. DETERMINANTS OF YOUTH EMPLOYMENT BEHAVIOR

The tabular material of the preceding section provides considerable information on differences by enrollment/attainment status and by sex and race in patterns of youth employment and work activity. In this section, these factors as well as several others are examined in a multivariate framework. The objective here is twofold: first, to examine those factors that serve as determinants or correlates of youth employment behavior and second, to determine the extent to which sex and race differences in patterns of youth employment persist once the other factors influencing employment behavior are controlled.

Examination of the determinants of youth employment patterns began with elaboration of a set of variables measuring individual characteristics presumed to influence work behavior. These characteristics reflected each respondent's 1978 educational and parental status, age, poverty status, parental (or spouse) employment during 1978, and family background.[9] Additional variables included in the analyses differentiated urban respondents from rural respondents and distinguished among the four census regions. It was anticipated that these latter

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[9] Specifically, parental educational attainment and number of siblings were used as family background measures.

"environmental" variables would pick up (albeit in a very crude way) certain labor market differences influencing employment behavior. Finally, the analyses were conducted separately by sex, with dummy variables differentiating respondents by race included in each equation.

Two dependent variables were used in the analyses: a dichotomous variable indicating joblessness and a continuous variable measuring the number of weeks worked during 1978.

Joblessness

In order to avoid econometric problems associated with the use of ordinary least squares regression analysis, probit analysis has been used to examine youth joblessness in 1978. Results are shown in Table 4.5.[10] The probability that a young person did not work at all during 1978 was significantly related to the bulk of the independent variables. As suggested by the tabular analyses, enrollment/attainment status is very strongly related to joblessness both for females and for males. Relative to high school students, male and female youth in virtually all six other enrollment/attainment status groups were significantly

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[10] Because of the nonlinear nature of probit analysis, estimated coefficients cannot be interpreted as partial derivatives (in contrast with regression analysis). In addition, the values of partial derivatives vary according to the predicted value of the dependent variable--being at a maximum when the predicted value equals 0.5 and diminishing as one approaches the extremes. In order to allow the reader to gauge the impact of different variables, then, the values of partial derivatives both at the maximum and at the mean are presented. Discussion of individual equations will focus on the latter values, and on those variables that are statistically significant.

Table 4.5 Determinants of Youth Joblessness During 1978: Probit Results[a]

Independent variable	Female				Male			
	Coefficient	Asymptotic t-value	Partial derivative: At maximum	Partial derivative: At mean	Coefficient	Asymptotic t-value	Partial derivative: At maximum	Partial derivative: At mean
Not enrolled in 1978								
High school dropout	-.086	-0.91	-.034	-.026	-.084	-0.82	-.033	-.018
High school graduate	-.530**	-5.08	-.211	-.157	-.291*	-2.34	-.116	-.062
Left school during 1978								
Dropped out	-.011	-0.09	-.004	-.003	-.248+	-1.88	-.099	-.053
Graduated	-.665**	-6.71	-.265	-.197	-.524**	-4.32	-.209	-.111
Enrolled throughout 1978								
High school student	--	--	--	--	--	--	--	--
Completed high school, began college	-.365**	-3.53	-.146	-.108	-.279*	-2.19	-.111	-.059
College student	-.470**	-4.26	-.187	-.139	-.319*	-2.47	-.127	-.068
Parent prior to 1978	.483**	6.50	.193	.143	-.406*	-2.26	-.162	-.086
Parent during 1978	.785**	9.37	.313	.233	-.170	-1.05	-.068	-.036
Age	-.005	-0.18	-.002	-.001	-.067*	-2.13	-.027	-.014
Respondent lived with mother who worked full-time throughout 1978	-.115+	-1.85	-.046	-.034	-.178*	-2.54	-.071	-.038
Respondent lived with father who worked full-time throughout 1978	-.049	-0.89	-.019	-.014	-.105+	-1.72	-.042	-.022
Respondent lived with spouse who worked full-time throughout 1978	-.128	-1.31	-.051	-.038	-.178	-0.48	-.071	-.038
Parental educational attainment	-.018*	-2.06	-.007	-.005	-.011	-1.15	-.004	-.002
Number of siblings	.005	0.55	.002	.002	.0003	0.03	.0001	.0001
Rural residence	.085	1.34	.034	.025	-.028	-0.37	-.011	-.006
Northeast region	.198*	2.35	.079	.059	.233*	2.43	.093	.049

[a]Table continued on next page

Table 4.5 continued

Independent variable	Female				Male			
	Coefficient	Asymptotic t-value	Partial derivative: At maximum	Partial derivative: At mean	Coefficient	Asymptotic t-value	Partial derivative: At maximum	Partial derivative: At mean
North central region	.139+	1.67	.055	.041	.013	0.13	.005	.003
South region	.260**	3.34	.104	.077	.202*	2.24	.081	.043
West region	--	--	--	--	--	--	--	--
Black	.356**	5.55	.142	.106	.453**	6.24	.181	.096
Hispanic	.301**	3.82	.120	.089	.230*	2.51	.092	.049
White	--	--	--	--	--	--	--	--
Intercept	-.597	-1.32	-.238	-.177	.259	0.48	.103	.055
X^2		485.87				181.74		
Number of respondents		3509				3133		

+Significant at the .10 level, two-tailed test.

*Significant at the .05 level, two-tailed test.

**Significant at the .01 level, two-tailed test.

less likely to have been nonworkers during 1978, other things equal. Nonenrolled graduates of each sex were most likely to have been employed during the year, with those who graduated in 1978 slightly more likely to have worked than those who had graduated earlier. The differences between dropouts and high school students were small and insignificant for females. In general, differences in joblessness according to enrollment/attainment status were more pronounced among females than among males, as indicated by comparing the extreme groups: 1978 female graduates were almost 20 percentage points more likely than their high school student counterparts to have worked compared to a corresponding difference of 11 percentage points among males.

Young mothers were significantly more likely to have remained jobless than their childless counterparts controlling for the other factors, with the effect being nearly twice as great for those young women who gave birth during 1978 as for those who were already mothers at the beginning of the year. This effect of early parenting appears to underlie much of the high joblessness of female dropouts evidenced in the cross tabular presentations (see Table 4.1). Among young men, those who were fathers throughout the year were more likely to have worked, although the difference was only weakly significant. Older male youth were also somewhat more likely to have worked during the year.

Dichotomous variables indicating whether or not the respondent had lived with a mother, father, or spouse who had worked full-time throughout 1978 were also included in the analyses.[11] Three of the four parental employment coefficients were significant and all four coefficients were negative, indicating that youth of both sexes with one or more parents who work full-time year-round are more likely themselves to be employed.[12]

Among female youth, those whose parents had high educational attainment were significantly more likely to have worked, while no such difference is apparent for males. Neither number of siblings nor residence in a rural area was significantly related to the probability of not working in 1978. Employment activity of both females and males was greatest in the West, with joblessness generally being significantly greater in each of the other regions.

Finally, even after controlling for all of the other variables included in the analysis, minority youth are significantly more likely than whites to have remained jobless during 1978. For minority youth, the probability of nonemployment in 1978 was 5 to 11 percentage points above that for whites of the same sex, other things equal. In addition, a pooled equation (not reported here) indicates that white females are about 5 percentage points more likely than their white male counterparts to have remained jobless. A separate equation including whether the youth lived in a poverty household showed that youth, especially females, from poverty households were significantly more likely than their nonpoor counterparts to remain jobless.[13]

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[11] These variables were included in the context of contemporary labor supply theory, which emphasizes the notion that labor supply decisions are made in a household or family context. Specifically, it was hypothesized that full-time year-round employment of other household members would substitute somewhat for employment activity of youth--i.e., these variables were expected to be positively associated with youth joblessness, other things equal. At least for the case of fathers working full-time year-round, this hypothesis is statistically indistinguishable from the hypothesis that there will be an added-worker effect for youth that is greater than any discouraged-worker effect.

[12] This may reflect either dominance of the discouraged-worker effect over the added-worker effect among youth, aid in job finding, or perhaps transmission to children of favorable parental attitudes toward employment (a "taste for work" effect).

The large net differences by race in youth joblessness (as well as the differences by poverty status) are disturbing, because early employment experience may be a significant determinant of subsequent labor market success. Conceptually, either supply side or demand side factors (or both) could be responsible for these racial differences. That is, differing attitudes toward work or differing sensitivities by race to the factors influencing joblessness might be relevant, and racial differences in job opportunities associated with patterns of residential segregation could be an important influence.[14] Since these alternate explanations have quite different policy implications, further analysis seems to be called for. In particular, possibilities for linking information on individuals to detailed characteristics of the local labor market areas in which they reside (to a much greater extent than has been feasible with other data sets, including the earlier NLS youth cohorts) appear to offer excellent opportunities for testing the importance of demand-oriented factors.

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[13] Since poverty is defined in relation to 1978 household income, use of the poverty variable raises potential problems of causality (the contribution of working youth to household income reduces the likelihood of the youth being in poverty). For this reason, then, as well as because missing data on income reduced the sample size by roughly 20 percent when the poverty variable was used, the estimates used in the text exclude the poverty variable. The estimates including the poverty variable are broadly similar to those reported in the text. Among the differences are that fatherhood and age are no longer significant for males, only one of the four parental employment coefficients remained significant, parental educational attainment was no longer significant for females, and Hispanic males were no longer significantly more likely to remain jobless than white males. Rural females were significantly less likely to have worked than their urban counterparts.

Weeks Worked

Regression estimates of the determinants of weeks worked are presented in Table 4.6.[15] Enrollment status differences in weeks worked are readily evident, albeit with somewhat different patterns by sex for 1978 school leavers and students. Non-enrolled youth of both sexes who had completed high school prior to 1978 worked an average of 11 to 13 weeks more than enrolled high school students, other things equal, and 8 to 9 weeks more than dropouts who left before 1978. Among female school leavers

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[14] With regard to this latter, demand-oriented explanation, it is of interest to note that minority youth are significantly more likely than whites to state that lack of transportation has caused them problems in getting a "good job." See the chapter on "Perceptions of Discrimination and Other Barriers to Employment" below.

[15] Econometrically, tobit analysis is preferable due to the bunching of cases at the lower limit. However, since only 13 percent of the males and 22 percent of the females did not work during 1978, it was felt that ordinary least squares regressions would be adequate.

Table 4.6 Determinants of Weeks Worked During 1978: Regression Results

Independent variable	Female		Male	
	Coefficient	t-value	Coefficient	t-value
Not enrolled in 1978				
High school dropout	3.82**	2.76	2.52+	1.82
High school graduate	12.89**	9.40	10.63**	7.79
Left school during 1978				
Dropped out	-1.15	-0.59	3.19+	1.89
Graduated	9.98**	7.99	4.62**	3.73
Enrolled throughout 1978				
High school student	-	-	-	-
Completed high school, began college	5.55**	4.37	-2.10	-1.59
College student	4.89**	3.53	-2.63+	-1.90
Parent prior to 1978	-8.55**	-7.66	2.83	1.47
Parent during 1978	-15.25**	-11.47	2.41	1.23
Age	1.30**	3.76	2.22**	6.20
Respondent lived with mother who worked full time throughout 1978	2.41**	3.20	0.68	0.93
Respondent lived with father who worked fulltime throughout 1978	2.02**	2.88	3.83**	5.59
Respondent lived with spouse who worked full time throughout 1978	0.38	0.33	8.18**	2.81
Parental educational attainment	-0.04	-0.38	-0.49	-0.43
Number of siblings	-0.04	-0.29	0.25+	1.72
Rural residence	-2.66**	-3.29	-1.78*	-2.18
Northeast region	0.90	0.87	0.77	0.73

Table 4.6 (continued)

Independent variables	Female		Male	
	Coefficient	t-value	Coefficient	t-value
North central region	0.96	0.97	2.35*	2.39
South region	-1.96*	-1.98	0.85	0.84
West region	-	-	-	-
Black	-6.82**	-6.65	-9.65**	-9.17
Hispanic	-5.13**	-3.62	-4.44**	-3.01
White	-	-	-	-
Intercept	1.18	0.20	-11.52+	-1.85
R square (adj)	0.184		0.156	
F-value	40.47		30.0	
Number of respondents	3509		3133	

+Significant at the .10 level, two-tailed test.

*Significant at the .05 level, two-tailed test.

**Significant at the .01 level, two-tailed test.

during 1978, dropouts worked no more than high school students while graduates worked significantly more (10 weeks, on average). Among male school leavers, by contrast, both dropouts and graduates worked significantly more than high school students, by almost 3 and 5 weeks, respectively. Females in college at the end of 1978 worked an average of 4 to 6 weeks more than high school students.

Older youth, particularly males, worked significantly more during 1978.[16] There are large and highly significant negative coefficients for young mothers, reflecting their high nonparticipation in the work force. Youth from rural households worked significantly fewer weeks, particularly females. Young women in the South worked less than those elsewhere, while young men in the North Central region worked more.

Parental educational attainment was not related to the work activity of youth, although parental work activity was: young women living with their mothers and whose mothers worked full-time year-round and young men living with fathers who worked full-time year-round worked 2 to 4 weeks more than other youth.[17]

Finally, after controlling for the factors just discussed, significant racial differences in weeks worked remain: minority females worked 5 to 7 weeks less than their white counterparts, and black and Hispanic males, respectively, worked an average of 10 and 4 weeks less than white males. These differences, compounded over time, imply the same kinds of disadvantages (present and future) for most minority youth as those adversely affecting youth from low-income households.[18] Again, then, it appears that policies designed to stimulate job creation in areas where low-income and minority youth are concentrated could have important social benefits. Such job creation (assuming that it involved more than just dead-end jobs) should permit these youth to acquire much more easily the knowledge and skills necessary to compete effectively in the labor market of the 1980s and beyond.

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[16] This reflects the fact that older male youth both in and out of school work more than their younger counterparts, whereas among female youth there are pronounced differences among students that are not so large among nonstudents.

[17] This link between work activity of youth and that of the same-sex parent could reflect the influence of the strength of demand for labor in the local labor market, job finding by parents, or a role-model influence.

III. JOB TURNOVER

An oft-cited characteristic of the youth labor market is a high degree of job turnover. In this section, data on youth employment patterns in 1978 for those youth who were employed during the year are examined in order to shed light on the extent of job turnover among youth. In addition, for comparative purposes, data on work behavior and job turnover for a sample of older males will also be examined.

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[18] A similar analysis including whether the youth was from a poverty household was also done. The estimates including the poverty variable are quite similar to those reported in the text.

Youth of both sexes from poverty households worked significantly less than their more advantaged counterparts, other things equal, by an average of about 9 weeks. This difference probably reflects, in large part, greater difficulties of low-income youth in finding desirable employment. The consequences of this difference are that poverty youth are less likely to acquire as much information, knowledge, and labor market skills as their more advantaged counterparts. This, in turn, bodes ill for their future prospects in the labor market, and reinforces tendencies toward the transmission of inequality across generations.

The distributions of jobs held and weeks worked during 1978 (as well as means of these two variables), cross-classified by enrollment/attainment status, are provided in Table 4.7 for those youth who were at least age 16 at the outset of the year and who had employment experience during the year. The table format has been altered to reflect the emphasis of this section on job turnover. More than half of employed youth held but one job during 1978, while almost one in six employed youth held three or more jobs (roughly three-fourths of this latter group held three jobs). Holding one job is not, by itself, an indication of job stability: while a third of those with one job worked all year round, nearly a quarter worked for fewer than 14 weeks. Thus, youth with one job include individuals with only a casual attachment to the work force as well as the most stable employees. It is largely for this reason that nonenrolled youth and students have such similar distributions of numbers of jobs held.[19]

Youth employed in 1978 who had left school during the year were least likely to have held only one job and they had the highest average number of jobs held. This high turnover presumably reflects the job shopping and worker/job mismatching

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[19] Compare, for example, nonenrolled graduates and high school students. The percentage of each group with one job is almost identical, while the distribution of weeks worked clearly shows the employment stability of graduates as well as the much more casual work attachment of students.

Table 4.7 Number of Jobs Held and Weeks Worked in 1978 by Those Employed in 1978, by Enrollment Status and Educational Attainment

(Percentage distributions)

Jobs held and weeks worked, 1978	Not enrolled in 1978		Left school in 1978		Enrolled throughout 1978			Total
	(1) High school dropouts	(2) High school graduates	(3) Dropped out	(4) Graduated	(5) High school student	(6) Completed high school, began college	(7) College student	
One job	56	57	42	48	58	54	52	54
1-13 weeks	15	5	17	7	20	18	15	13
14-39 weeks	18	9	14	22	20	22	21	17
40-49 weeks	6	6	5	4	4	2	2	4
50-52 weeks	17	38	6	16	14	13	14	20
Two jobs	27	30	24	31	31	30	33	30
1-13 weeks	3	1	2	2	3	3	2	2
14-39 weeks	10	7	15	13	17	15	19	13
40-49 weeks	5	6	4	4	3	4	5	5
50-52 weeks	9	15	4	12	8	8	7	10
Three or more jobs	17	13	32	21	11	16	16	16
1-13 weeks	0	0	0	0	0	0	1	0
14-39 weeks	8	3	15	6	5	10	6	6
40-49 weeks	4	4	8	8	3	3	5	5
50-52 weeks	4	6	9	7	3	4	4	5
Total	100	100	100	100	100	100	100	100
Mean jobs held	1.70	1.59	1.99	1.78	1.56	1.68	1.71	1.66
Mean weeks worked	33.4	43.4	30.1	36.6	29.8	30.9	31.7	34.8

UNIVERSE: Civilians age 16 to 20 on January 1, 1978 who worked for at least one week during 1978. (N=17,542,000)

that accompany the transition from school to work. Job instability among school leavers is clearly more prevalent among dropouts, fully a third of whom held three or more jobs compared to a fifth of the graduates. In addition, graduates tend to work more weeks, on average. Among pre-1978 school leavers, however, the tendency of dropouts toward multiple jobholding is much less pronounced. College students show a modest increase both in multiple jobholding and average number of weeks worked over high school students.

Focusing solely on the number of weeks worked during 1978, the importance of enrollment status and educational attainment is apparent. Nearly twice as many graduates worked 50-52 weeks, compared to their dropout counterparts. Conversely, dropouts were two to three times as likely as graduates to have worked for fewer than 14 weeks. Students were generally most likely to have had limited work experience--more than one in five students worked less than fourteen weeks. The employment stability of graduates relative to dropouts and the casual and intermittent nature of much student employment are thus readily evident.[20]

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[20] Data on the number of times during which youth with employment experience had one or more weeks without work during the year confirm both the high job turnover of students and school leavers as well as the difficulties of dropouts in the labor market. Thirty percent of all youth with employment experience worked all year round. This was true of only 20 percent of students and almost half of the students experienced multiple spells of not working. School leavers during 1978 were about half as likely to have worked all year as compared to those who left school prior to 1978, and graduates were twice as likely to be continuously employed as dropouts. Comparing multiple spells of not working of dropouts and graduates with respect to when they left school suggests the difficulties faced by dropouts in the labor market: whereas 31 percent of graduates leaving school during

Sex differences in work behavior of employed youth also vary by enrollment status and by educational attainment (Table 4.8). Among pre-1978 school leavers, male dropouts exhibit more job turnover than female dropouts but there is almost no difference among graduates in numbers of jobs held. Male dropouts and graduates tend to have more work experience during the year, with the largest differences among dropouts. Among those who left school during 1978, job turnover and number of weeks worked are higher for males, particularly among dropouts. Sex differences in these aspects of employment behavior are generally narrower among students. In fact, although at the high school level males hold slightly more jobs and work more weeks on average, at the college level the reverse is true. Again, to the extent that these cross-sectional differences are stable over time, the data suggest that the earlier young women terminate their schooling, the more likely they are to be at a disadvantage in the labor market relative to comparable young men.

Sex and race differences in the employment behavior of young workers are presented controlling for enrollment/attainment status in Tables 4.9, 4.10, and 4.11. The most direct evidence

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1978 had multiple spells of not working, only 17 percent of those who finished prior to 1978 had multiple periods of not working. Corresponding figures for dropouts are roughly 50 to 40 percent, respectively. Apparently, the process whereby young workers are matched up to jobs operates distinctly more smoothly for graduates than for dropouts. More generally, these data on spells of not working are consistent with the data presented above, indicating that instability of employment is a principal characteristic of the labor market experience of students, those making the transition from school to work, and those who are already out of school but whose low educational attainment puts them at a distinct disadvantage in competing for jobs.

Table 4.8 Number of Jobs Held and Weeks Worked in 1978 by Those Employed in 1978, by Enrollment Status, Educational Attainment, and Sex

Jobs held and weeks worked, 1978	Not enrolled in 1978				Left school in 1978				Enrolled throughout 1978						Total
	High school dropouts		High school graduates		Dropped out		Graduated		High school student		Completed high school, began college		College student		
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Total
One job	64	52	56	59	56	36	52	44	58	57	53	55	50	53	54
Less than 14 weeks	25	8	8	2	26	14	9	5	22	19	15	21	12	17	13
14-39 weeks	21	15	11	6	19	10	22	21	23	18	22	22	19	22	17
40-49 weeks	5	7	5	8	7	4	5	2	5	3	2	1	3	2	4
50-52 weeks	12	22	33	43	4	8	17	16	9	17	13	12	15	13	20
Two jobs	24	28	30	29	23	25	30	32	34	30	31	28	34	32	30
Less than 14 weeks	3	3	2	1	2	2	2	1	4	2	3	3	3	1	2
14-39 weeks	10	8	8	6	17	14	14	12	17	16	17	14	16	21	13
40-49 weeks	3	7	6	6	2	5	4	5	3	4	3	4	6	4	5
50-52 weeks	8	10	14	16	3	4	11	13	9	8	8	8	8	6	10
Three or more jobs	12	21	13	12	21	39	18	24	8	13	16	17	17	15	16
Less than 14 weeks	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0
14-39 weeks	9	8	2	3	9	18	5	7	4	5	10	10	5	6	5
40-49 weeks	2	6	5	4	6	10	7	9	2	4	2	4	6	4	5
50-52 weeks	2	6	6	5	6	11	6	8	1	4	4	3	4	4	3
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mean jobs held	0.98	1.65	1.37	1.56	1.21	1.86	1.57	1.81	1.17	1.32	1.45	1.54	1.57	1.57	1.44
Mean weeks worked	16.7	33.4	34.6	44.4	17.6	29.2	32.5	35.5	20.7	25.9	26.9	27.2	28.4	28.0	29.6

Universe: Civilians age 16 to 20 on January 1, 1978 who worked for at least one week during 1978. (N=17,542,000)

on job turnover is presented in Table 4.9. Overall, almost half of white youth who were employed in 1978 held more than one job during the year, compared to about 40 percent or less of minority youth. In general, blacks, and particularly black females, are least likely to have worked at more than one job. In addition, for every sex-enrollment/attainment group but one (female high school graduates) whites are more likely than their minority counterparts to have engaged in multiple jobholding.

Table 4.10 shows data on the percentages of employed youth who worked during more than three-fourths of 1978. Roughly half of white males and females and Hispanic males fell into this category, compared to about 40 percent of Hispanic females and black males and less than 30 percent of black females. There is greater variation by race across sex-enrollment/attainment groups, with whites being most likely to have worked 40 weeks or more in only about half of the cases.

Data on mean number of weeks worked by 1978 youth workers (Table 4.11) show that while whites generally have greater work experience than their minority counterparts, this is not always the case. For example, among workers of both sexes who were pre-1978 dropouts, Hispanic youth work somewhat more than whites (and considerably more than blacks). Indeed, among employed dropouts Hispanic youth appear to be the most stable employees, with relatively low job turnover and the highest percentages working 40 weeks or more, as well with the highest average number of weeks worked.

Overall, though, the three preceding tables indicate that

Table 4.9 Percentage of Employed Youth Who Worked at More than One Job in 1978, by Sex, Race, Enrollment Status, and Educational Attainment

Enrollment status and educational attainment, 1978	Female			Male			Total
	Black	Hispanic	White	Black	Hispanic	White	
Not enrolled							
High school dropouts	19	38	41	44	39	51	44
High school graduates	31	45	45	33	39	42	42
Left school during year							
Dropped out	38	39	47	31	65	71	57
Graduated	39	47	50	46	50	57	52
Enrolled throughout year							
High school student	29	34	44	35	32	45	42
Completed high school, began college	42	36	49	35	44	46	46
College student	42	50	51	41	46	47	48
Total	33	41	47	38	41	48	46

UNIVERSE: Civilians age 16 to 20 on January 1, 1978 who worked at least one week during 1978. (N=17,542,000)

Table 4.10 Percentage of Employed Youth Who Worked for 40 Weeks or More in 1978, by Sex, Race, Enrollment Status, and Educational Attainment

Enrollment status and educational attainment, 1978	Female			Male			Total
	Black	Hispanic	White	Black	Hispanic	White	
Not enrolled							
High school dropouts	14	36	32	40	69	60	46
High school graduates	46	73	70	65	72	84	75
Left school during year							
Dropped out	33	19	26	21	36	46	36
Graduated	27	49	52	55	46	53	51
Enrolled throughout year							
High school student	13	31	31	27	33	43	35
Completed high school, began college	35	18	34	15	38	32	32
College student	35	35	44	25	46	33	37
Total	28	42	47	39	51	53	48

UNIVERSE: Civilians age 16 to 20 on January 1, 1978 who worked for at least one week during 1978. (N=17,542,000)

Table 4.11 Mean Number of Weeks Worked by Those Employed in 1978, by Sex, Race, Enrollment Status, and Educational Attainment

Enrollment status and educational attainment, 1978	Female			Male			Total
	Black	Hispanic	White	Black	Hispanic	White	
Not enrolled							
High school dropout	19	30	29	32	42	38	33
High school graduate	34	40	42	40	42	47	43
Left school during year							
Dropped out	30	26	24	24	33	35	30
Graduated	27	32	37	37	35	38	37
Enrolled throughout year							
High school student	22	25	29	25	28	33	30
Completed high school, began college	30	26	32	21	34	30	31
College student	29	31	34	28	34	31	32
Total	27	31	35	31	36	37	35

UNIVERSE: Civilians age 16 to 20 on January 1, 1978 who worked for at least one week during 1978. (N=17,542,000)

whites tend to acquire more work experience with (on average) more employers; and these differences by race begin among high school students. Greater work experience should increase opportunities for acquisition of desirable skills, and should enhance knowledge of the world of work. To the extent that the knowledge and skills so acquired are ultimately converted to success in the labor market, the data presented in this section and in the first section of this chapter suggest that minority youth, particularly blacks, are already disadvantaged even prior to finishing or leaving school.[21]

Data on the number of jobs left by young workers during 1978 are presented and compared to similar data from the 1976 National Longitudinal Survey of Males age 24 to 34. Table 4.12 shows the distribution of number of jobs left by youth during 1978 cross-classified by enrollment/attainment status. Overall, more than 35 percent of employed youth did not leave a job,[22] while 40 percent left one job and over 20 percent left two or more jobs during the year.

School dropouts during 1978 are most likely to have left a job, and most likely to have left two or more jobs. Their graduate counterparts manifested distinctly less turnover, suggesting that the job-shopping process may be more difficult for dropouts, entailing more mismatching than for graduates.

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[21] On the other hand, minority youth do not hold as many jobs as whites. This may reflect greater stability on their part.

[22] This group includes those youth who worked all year round and youth who obtained a job during the year and held it at least until year's end.

Table 4.12 Number of Jobs Left in 1978, by Enrollment Status

(Percentage distributions)

Number of jobs left in 1978	Not enrolled in 1978		Left school in 1978		Enrolled throughout 1978			Total
	High school dropouts	High school graduates	Dropped out	Graduated	High school student	Completed high school, began college	College student	
0	34	51	22	38	37	30	27	37
1	40	32	36	37	45	45	47	40
2	17	14	27	18	14	17	20	16
3 or more	9	4	14	6	4	9	6	6
Total	100	100	100	100	100	100	100	100
Mean	1.02	.70	1.36	.94	.85	1.06	1.07	.92

UNIVERSE: Civilians age 16 to 20 on January 1, 1978 who worked for at least one week during 1978. (N=17,542,000)

This lesser turnover of graduates compared to dropouts is also evident among youth who had left or completed school prior to 1978, indicating that the difficulties of dropouts in finding desirable employment are not quickly eliminated as part of the transition from school to work.[23]

The number of jobs left by NLS males age 24 to 34 during the twelve months preceeding the 1976 survey was compared to that of males in the youth sample. Differences are considerable: more than 81 percent of the males stayed in the same job and 5 percent left two or more jobs, compared to less than 40 percent and more than 20 percent, respectively, for youth. The average number of jobs left was 0.26 for the adult males compared to 0.92 for the youth. Finally, the data on job turnover are further reinforced by consideration of the average number of weeks worked during the preceding year--whereas this figure was 34.9 for those youth who had worked in 1978, the comparable figure for adult males in 1976 was 49.0.

IV. REASONS FOR LEAVING JOBS

For those youth employed during 1978 who had left a job during the year, reasons for leaving the job have been examined in relation to age, school enrollment status, and sex and race.[24] In addition, for comparative purposes a similar analysis has been conducted for the NLS males age 24 to 34 in 1976.

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[23] Alternatively, it may be that the same attributes that motivate some youth to abandon school also operate in enhancing the likelihood that they will abandon jobs.

[24] In order to avoid multiple counting of those youth who left more than one job in 1978, the analysis focuses on the last job

The question to youth concerning why they had left the last job provided fourteen response categories which were collapsed into four broad categories: 1) involuntary separations (layoff, plant closing, or end of temporary job; discharged or fired; program ended); 2) quits for economic reasons (found a better job; didn't like employment conditions; wages were too low); 3) quits because work interfered with school; and 4) other reasons. The first two categories accounted for about 30 percent of total separations, while more than one-fifth of the separations took place because work interfered with school[25] and other reasons accounted for the remaining 15 percent of the terminations.

Examination of the reason for leaving last job cross-classified by age (Table 4.13) reveals that the importance of involuntary separations declines with age. While part of this pattern reflects the fact that younger youth are more likely to have left a previous job because of the end of a program to which the job was tied, the primary factor here is a clear age difference in the frequency of layoffs. The greater susceptibility of younger workers to layoffs presumably is a consequence (at least in part) of their lower levels of firm-specific human capital. Since younger workers are less likely to have had the opportunity to develop firm-specific skills, ceteris

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left during that year.

[25] Included in this group are cases of students returning to school after vacation.

Table 4.13 Reason for Leaving Last Job in 1978, by Age:[a] Youth Age 16-20 in 1978

(Percentage distributions)

Reason for leaving job	16	17-18	19-20	Total
Involuntary separation	38	30	26	30
Layoff, etc.	25	20	17	20
Discharged, fired	5	5	4	4
End of program	8	5	5	6
Quit for economic reasons	27	32	34	32
For better job	7	12	16	12
Employment conditions	19	14	14	15
Wages too low	1	6	4	4
Interfered with school	23	22	24	23
Other reasons[b] (specified)	4	7	9	6
Other reasons (unspecified)	9	10	10	10
Total percent	100	100	100	100

[a] Age is as of January 1, 1978.

[b] Due to own illness, disability, entering the armed forces, pregnancy, husband or wife changed jobs and/or moved, mother or father changed jobs and/or moved, family reasons (to get married, to care for children, illness of other family members).

UNIVERSE: Civilians age 16-20 on January 1, 1978 who were employed during 1978 and had left a job during 1978. (N=10,050,000)

paribus, they are more vulnerable to layoffs.[26] Among 16 year-olds, fully one-fourth of all separations fall into the layoff category.

A converse pattern is apparent for voluntary separations for economic reasons--these become increasingly important with age.[27] Quits increase because the respondent had found a better job, and to a lesser degree because wages were too low. However, the importance of quits because of undesirable employment conditions declines with age. This may reflect low levels of knowledge of the world of work among the youngest members of the youth labor force, leading in turn to greater job instability as the information-gathering search for a compatible worker-job match is pursued. In the same vein, the greater propensity among older youth workers who change jobs to quit for a better job probably reflects greater ongoing investment in job search by these workers, who are more likely to be full-time in the work force and hence benefit more from a move to a better job.[28] Quits because work interfered with school show no age pattern but the "other reasons" category (both specified and unspecified) is slightly more important for older than younger workers.

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[26] The younger group also may be more likely to take seasonal summer jobs which end at the time school begins.

[27] Further division of youth into students and nonstudents shows that these voluntary separations become more important with age only for the nonstudents, while the reverse is true among students.

[28] Among nonstudents, quits for a better job represented 3 percent of quits of 16 year olds and 22.5 percent of quits of those age 19-20.

Cross-classification of reason for leaving by enrollment status (Table 4.14) reveals, not surprisingly, the most obvious impact on quits because work interfered with school: among job leavers more than half of college enrollees and one-fourth of high school students left their last jobs for this reason, which was cited by about 5 percent of those not in school at the end of the year. Involuntary separations are relatively less important for college than high school students, and quits due to undesirable employment conditions are cited more than three times as frequently by high school students as by college students. This age difference underscores the value of previous work experience and knowledge for enhancing worker/job matches, even in the largely part-time student labor market.

Among those youth not in school at the end of 1978, the dropout/graduate comparisons are quite interesting. Dropouts during 1978 were almost twice as likely as their graduate counterparts to have been laid off or discharged from the last job left in 1978. This disadvantage of dropouts is also apparent among pre-1978 school leavers, but the differences between dropouts and gradautes are considerably smaller. This suggests that the transition from school to work is initially more difficult for dropouts, but as time goes by they are able to adjust to the situation and eventually find more appropriate job matches. Conversely, 1978 graduates are slightly more likely than their dropout counterparts to have quit the last job left in 1978 for a better job, while among those who left school prior to 1978 graduates are more than twice as likely as dropouts to have

Table 4.14 Reason for Leaving Last Job in 1978, by Enrollment Status in 1978: Youth Age 16-20 in 1978

(Percentage distributions)

Reason for leaving job	Not enrolled in 1978		Left school in 1978		Enrolled throughout 1978			
	High school dropouts	High school graduates	Dropped out	Graduated	High school student	Completed high school, began college	College student	Total
Involuntary separation	31	25	42	27	38	27	26	30
Layoff, etc.	20	17	26	19	25	20	16	20
Discharged, fired	8	6	11	2	4	2	2	4
End of program	2	2	4	6	8	5	8	6
Quit for economic reasons	42	52	38	45	26	18	10	32
For better job	11	26	14	17	8	7	5	12
Employment conditions	22	18	19	21	16	8	5	15
Wages too low	8	8	5	7	2	2	0	4
Interfered with school	1	3	7	11	26	42	54	23
Other reasons[a] (specified)	14	13	6	6	3	3	1	6
Other reasons (unspecified)	13	8	9	12	9	10	9	10
Total percent	100	100	100	100	100	100	100	100

[a] Due to own illness, disability, entering the armed forces, pregnancy, husband or wife changed jobs and/or moved, mother or father changed jobs and/or moved, family reasons (to get married, to care for children, illness of other family members).

UNIVERSE: Civilians age 16-20 on January 1, 1978 who were employed during 1978 and had left a job during 1978. (N=10,050,000)

done so. Apparently upward mobility in the youth labor market is distinctly more difficult for those youth who fail to complete high school, and this difficulty does not appear to diminish with time. The difficulties of dropouts in the labor market are evident: they constitute the group of job leavers most prone to leave because (1) wages are too low, (2) employment conditions are undesirable, and (3) they were laid off, discharged or fired.

Overall, involuntary turnover is highest among dropouts and high school students, and lowest among graduates and college students. Quits for economic reasons, on the other hand, are most frequent among graduates, followed in turn by dropouts , high school students, and college students.

From a policy perspective, these findings suggest that programs which provide youth with useful work experience, perhaps in several different employment situations, could prove quite helpful in reducing the high job turnover in the youth labor market, particulary among high school students and school dropouts. Improved knowledge of the world of work should reduce turnover arising from worker/job mismatches, and skill acquisition should diminish the vulnerability of young workers to layoffs.

Consideration of reason for leaving last job cross-classified by sex and race group (Table 4.15) reveals several interesting patterns. Young women who leave jobs are slightly less likely to have terminated involuntarily, due to lower levels of layoffs, discharges, and firings, but the impact of programs ending is greater, particularly among blacks. Quits for economic

Table 4. 15 Reason for Leaving Last Job in 1978, by Sex and Race: Youth 16-20 in 1978

(Percentage distributions)

Reason for leaving job	Female			Male			
	Black	Hispanic	White	Black	Hispanic	White	Total
Involuntary separation	42	34	27	50	37	28	30
Layoff, etc.	19	21	19	27	26	19	20
Discharged, fired	5	4	4	9	5	4	4
End of program	18	8	4	14	5	4	6
Quit for economic reasons	21	28	34	19	31	34	32
For better job	5	7	11	7	13	16	13
Employment conditions	13	16	19	8	10	13	15
Wages too low	3	5	4	4	8	5	4
Interfered with school	14	17	20	20	23	27	23
Other reasons[a] (specified)	10	11	10	4	1	2	6
Other reasons (unspecified)	13	10	10	8	8	9	10
Total percent	100	100	100	100	100	100	100

[a] Due to own illness, disability, entering the armed forces, pregnancy, husband or wife changed jobs and/or moved, mother or father changed jobs and/or moved, family reasons (to get married, to care for children, illness of other family members).

UNIVERSE: Civilians age 16-20 on January 1, 1978 who were employed during 1978 and had left a job during 1978. (N=10,050,000)

reasons account for similar percentages of all job terminations for both sexes. However, young men are more likely to have quit because of low wages or finding a better job, while young women show a greater (relative) propensity to quit due to undesirable employment conditions. The greatest sex difference is for "other reasons," which account for just over 10 percent of male terminations and about 20 percent of female terminations. Childbearing and other family/household responsibilities account for the bulk of this difference. Provision of information about birth control and child care services would presumably tend to reduce some of these sex differences.

With regard to differences by race, the disproportionate participation of minority youth in employment programs is reflected in the fact that compared with whites, proportionately more than three times as many blacks and almost twice as many Hispanics left their last job because of the end of a program. In general, involuntary separations are least frequent among whites (less than 30 percent of separations) and most evident among blacks (approaching half of all job leavers), with Hispanics occupying an intermediate position. A reverse pattern is apparent for quits for economic reasons: about one-third of white job leavers quit for economic reasons, compared to less than 30 percent of Hispanics and roughly one-fifth of blacks.

These data suggest that employed minority youth are more likely to lose their jobs and less willing to leave their jobs than their white counterparts. Such an inference must be regarded cautiously, since the data do not refer to all employed youth but rather to those who left a job in 1978.[29] Alternatively, minority youth may be more concentrated in labor markets where jobs are relatively scarce and/or where the industrial composition results in youth jobs with a greater likelihood of layoffs.

Data on reasons for leaving the last job for males age 24 to 34 in 1976 who had left a job in the preceding year are provided in Table 4.16, with cross-classifications by race and by educational attainment. The largest difference between the data for adult male job leavers and those for youth job leavers is, not surprisingly, in the frequency of jobs left because work interfered with school. This difference is largely offset by a corresponding difference in the relative frequencies of quits for economic reasons, which represented half of the mobility of adult males and less than a third of the job separations of youth. At the same time, the overall distribution for the adult males of reasons for leaving last job is extremely similar to that for pre-1978 high school graduates.[30] More generally, involuntary separations are similar for the adult males and the youth,

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[29] This inference is consistent with the observation earlier in this chapter noting that minority youth appear to have more difficult transitions between jobs than their white counterparts. If the inference is correct, it suggests the possibility of discrimination in the youth labor market.

[30] However, whereas 80 percent of adult males did not leave a job in the year preceding the survey and 15 and 5 percent left one and two or more jobs, the corresponding figures for pre-1978 male graduates are 55, 30, and 15 percent, respectively. Thus, while the reasons for leaving jobs are quite similar for the two groups, the frequency of job turnover is considerably higher for young male graduates than for the older males.

Table 4.16 Reason for Leaving Last Job, by Race and Highest Grade Completed: Young Men Age 24-34 in 1976

(Percent distributions)

Reason for leaving job	Black	White	Dropout	High school graduate	Some college	Total
Involuntary separation	47	25	36	28	22	27
Layoff, etc.	42	21	35	22	19	23
Discharged, fired	6	4	2	6	4	4
Quit for economic reasons	37	52	40	49	56	51
For better job	11	19	7	14	25	18
Employment conditions	10	14	12	12	16	14
Wages too low	11	13	18	14	10	13
Closed/opened own business	5	6	3	10	5	6
Interferred with school	3	3	0	1	5	3
Other reasons[a] (specified)	7	9	11	11	8	9
Other reasons (unspecified)	7	12	14	11	10	11
Total percent	100	100	100	100	100	100

[a] Due to own illness, disability, family reasons, or location and/or community.

UNIVERSE: Civilian males age 24-34 in 1976 who were employed in the year prior to the 1976 survey and had left a job during that time. (N=3,105,000) although the frequency of such separations is much lower for adults than for youth. Overall, school becomes less important while quits for economic reasons become more important as youth complete school and enter the full-time work force.

Racial differences among adult male job leavers in reasons for leaving jobs parallel the pattern observed among male youth. Black job leavers are almost twice as likely as whites to have left a job involuntarily, and correspondingly less likely to have quit for economic reasons. For adults as for youth, racial differences in economically-motivated voluntary mobility are greatest with respect to quits for a better job, lending credence to the notion that discrimination may be seriously inhibiting the upward mobility of minority workers, adult as well as youth.

The importance of educational attainment on type of job turnover of adults is also evident in Table 4.16. As was the case for youth job leavers, increasing educational attainment is associated with a lower likelihood of involuntary separation and an increased probability that job turnover is voluntary and economically motivated. As with youth, the greatest difference by schooling is in quits for a better job. It thus appears that the greater susceptibility to layoffs and limited upward mobility of dropout youth in the labor market does not represent simply a more difficult transition from school to work that time will eventually smooth over; the labor market disadvantages of dropout youth persist and follow them through much of their adult working lives.

Chapter 4 Glossary

AGE
A continuous variable representing the age of the respondent (in years) as of the date of interview.

BLACK
See race.

COLLEGE STUDENT
See "enrollment status and educational attainment."

COMPLETED HIGH SCHOOL, BEGAN COLLEGE
See "enrollment status and educational attainment."

DROPPED OUT
See "enrollment status and educational attainment."

EDUCATIONAL ATTAINMENT (YOUNG MEN)
The highest grade of regular school the respondent reported having completed and gotten credit for as of the interview date. Categories are dropouts (did not complete high school), high school graduates, and those who completed at least some college.

ENROLLED THROUGHOUT 1978
See "enrollment status and educational attainment."

ENROLLMENT STATUS AND EDUCATIONAL ATTAINMENT
Whether the respondent was enrolled in regular school during 1978 combined with whether the respondent completed and got credit for 12th grade (received a high school diploma or GED). Categories are not enrolled during 1978 and not a high school graduate, not enrolled during 1978 and a high school graduate, left school during 1978 and not a high school graduate, left school during 1978 and a high school graduate, enrolled all year and not a high school graduate, enrolled all year and graduated during the year, and enrolled in college all year. For regression analysis, 7 binary variables were created. Each is coded 1 if the respondent is in the category being represented and 0 otherwise.

GRADUATED
See "enrollment status and educational status."

HIGH SCHOOL DROPOUT
See "enrollment status and educational attainment."

HIGH SCHOOL GRADUATE
See "enrollment status and educational attainment."

HIGHEST GRADE COMPLETED (YOUNG MEN)
The highest grade of regular school the respondent reported having completed and gotten credit for as of the interview date. Categories are dropouts (did not complete high school), high school graduates, and those who completed at least some college.

HISPANIC
See "race."

JOBLESSNESS
A binary variable coded 1 if the respondent did not work at all during 1978.

JOBS HELD DURING 1978
The number of jobs the respondent worked at during 1978. Categories are none, one, two, and three or more.

LEFT SCHOOL DURING 1978
See "enrollment status and educational attainment."

NORTHEAST
See "region."

NORTH CENTRAL
See "region."

NOT ENROLLED IN 1978
See "enrollment status and educational attainment."

NUMBER OF JOBS LEFT IN 1978
The number of jobs that the respondent left during 1978. Categories are none, one, two and three or more.

NUMBER OF JOBS LEFT IN PRECEEDING YEAR (YOUNG MEN)
The number of jobs that the respondent left during the one-year period preceding the 1976 interview. Categories are none, one, and two or more.

NUMBER OF SIBLINGS
The number of brothers and sisters that the respondent has.

PARENT DURING 1978
A binary variable coded 1 if the respondent became a parent during 1978.

PARENT PRIOR TO 1978
A binary variable coded 1 if the respondent was a parent prior to 1978.

PARENTAL EDUCATIONAL ATTAINMENT
The highest grade of regular school that the respondent reported either parent had completed. Years of college are denoted 13, 14, 15, etc.

RACE

The race and ethnicity of the respondent based on the race and ethnicity of the respondent's parents. The categories are Hispanics, non-Hispanic blacks, and non-Hispanic nonblacks. These are usually referred to as Hispanics, blacks and whites. For regression analysis, 3 binary variables are created. Each is coded 1 if the respondent is in that race or ethnic group and 0 otherwise.

RACE (YOUNG MEN)

The race of the respondent. Categories are black, white, and other, with "other" omitted from separate compilations by race due to small sample size.

REASON FOR LEAVING LAST JOB IN 1978

The reason the respondent left the last job that was left during 1978. The categories are layoff, plant closed, or end of temporary or seasonal job; discharged or fired; program ended; quit for a better job; quit because of employment conditions; quit because wages too low; quit because it interfered with school; quit for other reasons (specified: illness, disability, armed forces, parent or spouse changed jobs and/or moved, family reasons); quit for other reasons (unspecified).

REASON FOR LEAVING LAST JOB IN PRECEEDING YEAR (YOUNG MEN)

The reason the respondent left the last job that was left during the year preceeding the 1976 interview. The categories are layoff, plant closing, or end of a temporary or seasonal job; discharged or fired; quit for a better job; quit because of employment conditions; quit because wages too low; closed or opened own business; quit because it interfered with school; quit for other reasons (specified: illness, disability, family reasons, or location and/or community); quit for other reasons (unspecified).

REGION

The Census region in which the respondent lived at the time of interview. Categories are Northeast, North Central, South and West. For regression analysis, 4 binary variables have been created. Each is coded 1 if the respondent lived in the region being represented and 0 otherwise.

RESPONDENT LIVED WITH FATHER WHO WORKED FULL-TIME THROUGHOUT 1978

A binary variable coded 1 if the respondent lived with his/her father who usually worked 35 hours per week or more all through 1978.

RESPONDENT LIVED WITH MOTHER WHO WORKED FULL-TIME THROUGHOUT 1978

A binary variable coded 1 if the respondent lived with his/her mother who usually worked 35 hours per week or more all through 1978.

RESPONDENT LIVED WITH SPOUSE WHO WORKED FULL-TIME THROUGHOUT 1978
A binary variable coded 1 if the respondent lived with a spouse who usually worked 35 hours per week or more all through 1978.

RURAL RESIDENCE
A binary variable coded 1 if the respondent lived in a county that was at least 50 percent rural in 1970.

SEX
The sex of the respondent.

SEX AND RACE
The respondent's sex and race combined. Categories are Hispanic males, black males, white males, Hispanic females, black females, and white females.

SOUTH
See "region."

SPELLS NOT WORKING
The number of spells of one week or more in 1978 during which the respondent was not working. Categories are none, one and two or more.

WEEKS WORKED IN 1978
The number of weeks in 1978 during which the respondent did any work not counting work around the house. Categories are 0, 1-13, 14-39, 40-49 and 50-52.

WEST
See "region."

WHITE
See "race."

WORK EXPERIENCE IN 1978
The number of weeks worked in 1978 combined with the number of jobs held in 1978. Categories range from 0 weeks and 0 jobs to 50-52 weeks and 3 or more jobs.

Chapter 4 References

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CHAPTER 5

JOB SEARCH ACTIVITIES OF YOUTH

by Michael E. Borus, Choongsoo Kim and Richard Santos

Job search in the youth labor market is extensive. In the four weeks before the NLS interviews in 1979, 3.4 million unemployed youth age 16-22 were searching for work and an additional 3.4 million employed youth in the same age bracket were looking for other jobs. Youth unemployment can be minimized if young people know where to look for work, whom to ask for job information, what kinds of jobs are available and how much they pay. This chapter will address the questions, Which young people are seeking employment or new jobs? Why are they doing so? How long do they look? What job search methods do they use? What types of jobs are they seeking? and Do they seek employment at reasonable wage rates--that is, at what wage levels would they accept various types of employment, and do the wages sought by unemployed teenagers compare with the wages paid to youth who are currently employed?

I. WHO ARE THE JOB SEEKERS?[1]

Among the unemployed, the majority of job seekers were female (Table 5.1).[2] Most employed job seekers were males and

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[1] The small number of youth interviewed after May 1979 are excluded from the analyses of sections I-III to control for the large influx of students into the labor force for the summer. These youth are assumed to be distributed proportionately to those interviewed before June.

[2] Approximately one-fourth of the employed youth stated they were looking for other work. The proportion of employed youth in search of other work did not

Table 5.1 Selected Characteristics of Employed Youth Seeking Work and Unemployed Youth, by Race

(Percentage distributions)

Characteristic	Employed[a]				Unemployed[b]			
	Black	Hispanic	White	Total	Black	Hispanic	White	Total
Sex								
Female	40	48	48	47	52	46	53	53
Male	60	52	52	53	48	54	46	47
Age								
16-17	20	22	28	27	39	46	44	43
18-19	36	42	36	37	34	29	33	33
20-22	44	36	37	37	27	25	23	24
Enrollment status								
High school dropout	19	20	11	12	22	36	23	24
High school student	24	28	29	29	46	44	44	45
College student	17	14	22	21	9	10	10	10
Nonenrolled high school graduate	40	38	38	39	23	11	23	22
Marital and family status								
Never married	91	86	90	90	93	83	85	87
Married	6	9	9	9	4	43	13	11
Separated, widowed, divorced	3	6	1	1	3	4	2	2
Household status								
At home, with parents	77	71	71	72	86	83	77	80
Away at college, in dormitory	2	2	7	6	2	1	3	3
Has own dwelling	21	27	22	22	13	17	19	18
Ever had child								
Total	12	10	4	5	18	12	10	12
Females only	24	18	5	7	34	21	16	21
Family income								
Less than $5000	20	20	7	9	24	27	10	15
$5000-$9999	30	32	13	15	31	33	16	21
$10,000-$14,999	20	14	13	14	18	13	19	19
$15,000-$19,999	13	12	16	15	11	9	19	16
$20,000-$24,999	7	11	13	12	8	4	14	12
$25,000-$29,999	3	8	13	12	4	7	12	10
$30,000-$39,999	5	3	14	13	3	3	7	6
$40,000 or more	2	0	11	10	1	4	5	4
Ever participated in a government education or training program	45	41	16	20	38	29	14	21

[a] UNIVERSE: Employed civilians age 16-22 on interview date who were looking for other work. (N=3,370,000).

[b] UNIVERSE: Civilians age 16-22 who were unemployed on interview date. (N=3,410,000)

older than the unemployed; nearly three-fourths were 18 years of age or older, in comparison to 57 percent of the unemployed. Nearly two-fifths of employed job seekers were high school graduates not enrolled in college and almost half of the unemployed were enrolled in high school. The unemployed were twice as likely as the employed to be high school dropouts.

The vast majority of both the unemployed and the employed live at home with their parent(s), and most are unmarried. Nevertheless, their need to earn an income is clear: one in every five of the unemployed young women have had children and over half the unemployed come from families with incomes below $15,000. Among black females, a third of the unemployed and a fifth of the employed have had children, and the proportion of employed Hispanic females approached that of blacks. The proportion of white female job seekers with children was much lower.

Most black and Hispanic unemployed and employed job seekers came from families with annual incomes of $10,000 or less, but only a fifth of the employed and a fourth of the unemployed white job seekers were in families with that income level. This lower family income of minority job seekers suggests how important it is for them to obtain work. Their lower family income also explains why minorities were two to almost three times more likely than whites to have participated in government sponsored

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vary by age, sex, race, or school enrollment status, except among employed Hispanics, who had a lower proportion seeking other work. No major differences were thus evident in the characteristics of employed youth who looked for other work and those who did not.

employment and training programs.

II. WHY DO THEY SEEK WORK?

Several common reasons given by the unemployed for seeking work were specified in the survey: lost job, quit job, left school, enjoy working, help with family expenses, wanted temporary work, need money, need to support oneself, and "other." Slightly over half of the unemployed youth said that their major reason for seeking work was that they needed money (Table 5.2). Nearly one-fifth of the unemployed were searching for work because they either lost or left their most recent jobs. Youth age 16-17 cited need for money more often than youth age 18 and older, who were more likely to be seeking work because they had lost or left their jobs. Since age is also closely associated with school enrollment status, it is not surprising to find a higher proportion of job seekers who lost or left a job among high school graduates not enrolled in college than among those enrolled in school. Furthermore, a quarter of the unemployed dropouts were looking for work because they either lost or quit their jobs.

More Hispanics and whites than blacks and more males than females were seeking work because they either lost or quit their previous jobs. While less than 10 percent of the unemployed cited the need to help with family expenses or support themselves as reasons for seeking work, more Hispanics than either blacks or whites sought work to help defray family expenses. More blacks, however, wanted employment in order to support themselves.

Table 5.2 Main Reason Unemployed Youth Looked for Work, by Selected Characteristics

(Percentage distributions)

Characteristic	Lost job	Quit job	Left school	Enjoy working	Help with family expenses	Wanted temporary work	Needed money	To support self	Other
Age									
16-17	5	5	2	2	3	5	65	2	12
18-19	12	13	3	2	4	3	48	5	9
20-22	13	15	3	2	3	2	42	7	13
Sex									
Female	7	9	2	3	4	4	54	5	12
Male	11	12	2	1	2	3	54	4	11
Race									
Black	7	6	3	3	5	3	53	8	12
Hispanic	13	10	2	1	9	2	50	3	11
White	9	12	2	2	2	4	55	3	11
Enrollment status									
High school dropout	14	13	4	1	6	10	43	6	13
High school student	4	5	1	2	3	5	67	2	11
College student	6	12	1	3	2	9	52	6	9
Nonenrolled high school graduate	15	19	5	3	1	1	37	7	12
Total	9	10	2	2	3	4	54	5	11

UNIVERSE: Civilians age 16-22 who were unemployed on interview date. (N=3,410,000)

Reasons for Seeking Work Cited by the Employed

Employed job seekers could specify the desire for advancement, better pay, better working conditions, more skills and experience, new location, different field, full-time work, or "other" as their reasons for seeking work. The largest proportion--nearly two-fifths--of employed job seekers were looking for other work because of inadequate pay at their current jobs (Table 5.3). One-fourth of employed youth sought work because of the desire to enter a different field or the desire for full-time work.

Employed blacks were more likely than whites or Hispanics to be looking for other work because of inadequate pay. Inadequate pay was also given as a reason more often by males than females. Younger youth were more likely than those 20 and over to cite inadequate pay as the main reason for seeking other work, and employed high school students were the most likely to cite inadequate pay. In addition, more high school dropouts and college-enrolled youth cited a desire for full-time work as their main reason for seeking new employment than high school students or high school graduates not enrolled in college.

III. HOW DO YOUNG PEOPLE SEARCH FOR JOBS?

Average Length of Job Search

On average, unemployed youth had been searching about eight weeks for work, and employed youth had been looking seven

Table 5.3 Main Reason Employed Youth Looked for Work, by Selected Characteristics

(Percentage distributions)

Characteristic	Advancement	Pay	Working conditions	Full-time work	Skills, experience	New location	Different field	Other	Total percent
Age									
16-17	1	40	6	12	2	2	13	25	100
18-19	2	41	4	15	3	1	14	21	100
20-22	5	33	5	13	5	3	12	24	100
Sex									
Female	3	35	5	14	3	1	13	25	100
Male	2	40	5	13	4	3	13	21	100
Race									
Black	3	50	6	9	3	1	9	20	100
Hispanic	5	41	6	15	2	2	11	19	100
White	3	36	5	14	3	2	14	24	100
Educational status									
High school dropout	3	40	6	21	1	3	11	17	100
High school student	2	44	6	12	2	1	10	24	100
College student	*	31	3	19	5	2	15	25	100
Nonenrolled high school graduate	5	36	6	9	4	3	15	23	100
Total	3	38	5	13	3	2	13	23	100

*Percentage is between 0.1 and 0.5.

UNIVERSE: Employed civilians age 16-22 on interview date who were looking for other work. (N=3,370,000) weeks. Among the unemployed, the length of the job search increased with age, and high school graduates not enrolled in college and high school dropouts had been looking on average longer than those in school. Among the employed, differences by age, sex, race and enrollment status in number of weeks looking for work were slight and generally followed the pattern of the unemployed.

Number of Job Search Methods

Job seekers were asked to list the methods they used to find employment: these could include contacting an employer directly, looking in the newspaper, contacting friends and relatives, and a variety of other activities. Although a job seeker could list five or more methods to locate work, over half of the unemployed and employed job seekers used only one method. In general, older job seekers use more methods.

Job Search Methods of Unemployed Youth

The most frequently used job search activity, used by nearly two-thirds of the unemployed youth, was making contact directly with an employer (Table 5.4). Looking in the newspaper for possible job openings was the second most popular technique, used by over one-third of the unemployed. Friends and relatives and the state employment service were used equally as sources of job information; about one-sixth relied on each of these. For the most part, 10 percent or less of the unemployed relied on other methods--private employment agencies, the school employment

Table 5.4 Percentage of Unemployed Youth Using Various Job Search Methods, by Selected Characteristics

Characteristic	State employment agency	Private employment agency	Contact employer directly	Friends or relatives	Placed or answered ads	Looked in news-paper	School employment service	Other
Age								
16-17	6	3	66	20	6	31	10	9
18-19	21	6	65	16	8	39	3	9
20-22	25	5	61	13	9	41	2	15
Sex								
Female	16	4	61	14	10	42	6	11
Male	15	5	68	20	5	28	7	10
Race								
Black	18	5	67	14	9	32	6	9
Hispanic	15	3	64	20	6	28	8	12
White	15	4	64	17	7	38	6	11
Enrollment status								
High school dropout	23	5	69	13	4	35	0	9
High school student	6	3	64	21	6	31	11	10
College student	17	8	64	6	11	31	9	13
Nonenrolled high school graduate	29	6	59	12	12	49	1	12
Total	16	4	64	17	7	36	6	10

UNIVERSE: Civilians age 16-22 who were unemployed on interview date. (N=3,410,000)

service, placing or answering ads, and other miscellaneous activities--to find employment.[3]

Although contacting an employer directly remained the method used most frequently by all youth, the use of other methods among unemployed youth varied by age, race, sex, and school enrollment status.

Older youth used state employment agencies and the newspaper more frequently than younger youth; in contrast younger youth relied more on friends and relatives as sources of job information.

High school students relied less frequently on state employment agencies and more frequently on friends and relatives than either dropouts or nonenrolled high school graduates. Half of nonenrolled high school graduates, however, look in the newspaper, in comparison to approximately a third of students or dropouts.

While contacting an employer directly was by far the most frequently used method among all racial groups, newspapers were used more often by whites and blacks than Hispanics. Hispanics, however, relied more on friends and relatives than whites or blacks.

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[3] The job search methods preferred by youth in the NLS survey are similar to the ones noted for youth age 16-24 in the Current Population Survey (CPS), March 1979. In the CPS survey, however, "looked in the newspaper" is combined with "placing or answering ads" and "school employment service" is included in "other methods." Even with the job search category differences and the slightly older youth population in the CPS, that survey also shows that youth basically prefer to (1) contact an employer directly, (2) place or answer an ad, or (3) use friends/relatives or state employment service as their major source of job search information.

Females relied less on direct contact with an employer and used friends and relatives less than males. However, they searched the newspaper one and a half times more frequently than males. The state employment service was used to nearly the same extent by both females and males.

Job Search Methods of Employed Youth

As with the unemployed, the foremost job search method of employed youth was to contact an employer directly (Table 5.5). In general, the differences by age, school enrollment status, race, and sex were similar to those noted for the unemployed. The striking exception to these similarities was the race difference on the use of state employment agencies between unemployed and employed job seekers. Nearly one-fifth of black employed job seekers relied on the state employment agency, compared to about 9 percent of whites and Hispanics. Among the unemployed, racial differences in the use of state employment agencies were not nearly so pronounced.

IV. WHAT TYPES OF JOBS DO YOUTH SEEK?

Full-time or Part-time Work

Slightly over half of the unemployed youth sought part-time work.[4] As one would expect, youth enrolled in school were primarily looking for part-time work and those out of school for

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[4] No data on the proportion seeking part-time work were available for the employed job seekers.

Table 5.5 Percentage of Employed Youth Using Various Job Search Methods, by Selected Characteristics

Characteristic	Nothing	State employment agency	Private employment agency	Contact employer directly	Friends and relatives	Placed or answered ads	Looked in news-papers	School employment service	Other
Age									
16-17	2	4	*	61	27	3	28	6	11
18-19	1	11	2	62	24	5	37	5	9
20-22	*	13	7	58	22	12	34	5	11
Sex									
Female	1	10	5	60	22	8	38	6	11
Male	1	10	3	60	25	6	29	5	10
Race									
Black	0	19	8	59	18	6	33	6	10
Hispanic	2	8	4	60	24	7	37	12	7
White	1	9	3	61	25	7	33	5	*
Enrollment status									
High school dropouts	*	18	3	65	19	5	36	*	9
High school student	3	3	*	60	28	2	26	7	13
College student	1	6	*	61	27	8	31	14	13
Nonenrolled high school graduate	*	15	8	59	20	11	40	1	7
Total	1	10	4	60	24	7	33	5	10

UNIVERSE: Employed civilians age 16-22 on interview date who looked for other jobs. (N=3,370,000)

*Percentage is between 0.1 and 0.5.

full-time work. Older youth were less likely to be seeking part-time work (Table 5.6). Nearly eight out of every ten unemployed youth age 16-17 sought part-time work, compared to about a third of youth 18 years and older. Slightly more blacks than whites or Hispanics sought full-time work. With few exceptions, nearly the same proportion of unemployed males and females sought full-time work.

Occupations

Males. Jobs in service occupations and as laborers, operatives and craftspersons were sought by 80 percent of the unemployed males and 68 percent of the employed males. Employed males were more likely to be looking for work as professionals or craftspersons and less likely than unemployed males to be seeking jobs as service workers. Blacks, especially the unemployed, more frequently than whites or Hispanics sought work in the service and clerical occupations. While both employed and unemployed blacks sought work as craftspersons less frequently than whites or Hispanics, among unemployed blacks only 6 percent sought work as craftspersons versus one-sixth of unemployed Hispanics and whites.

Females. Among both employed and unemployed female job seekers, three occupational groups--clerical, services, and sales--comprised most of the jobs sought. Eleven percent of employed females seeking other work were looking for professional and technical jobs, but only 5 percent of the unemployed aspired

Table 5.6 Amount of Work Desired by Unemployed Youth by Sex and Selected Characteristics

(Percentage distributions)

Characteristic	Female		Male		Total	
	Full time	Part time	Full time	Part time	Full time	Part time
Age						
16-17	18	82	23	77	21	79
18-19	63	38	64	36	63	37
20-22	66	34	74	26	69	31
Race						
Black	55	45	49	51	52	48
Hispanic	49	51	43	57	46	54
White	42	58	44	56	43	57
Enrollment status						
High school dropout	81	19	92	8	86	14
High school student	9	91	14	86	12	88
College student	32	69	38	62	35	65
Nonenrolled high school graduate	76	25	90	10	80	20
Total	46	54	46	55	46	54

UNIVERSE: Civilians age 16-22 who were unemployed on interview date. (N=3,410,000)

to these. Clerical occupations were the most sought after by all females but especially by blacks and Hispanics. Proportionately, more employed white females than blacks or Hispanics sought work in service and sales occupations. Among unemployed females, about a third of both whites and blacks wanted service jobs, compared to a fifth of the Hispanics. Unemployed Hispanic females were more likely than blacks or whites to want sales work.

Asking Wages

Both employed and unemployed job seekers gave the minimum wage rate that they would be willing to take in their new employment. On average, employed job seekers had higher asking wages than the unemployed--$3.85 versus $3.23 an hour (Table 5.7). Since most employed job seekers were looking for work to obtain higher pay, the higher wage rate sought by the employed is understandable. In addition, both employed and unemployed males had higher asking wages than females.

The lowest asking wages were given by youth age 16-17 and those enrolled in high school, irrespective of sex. The asking wage of these youth closely reflected the then current federal minimum wage of $2.90 an hour. Conversely, youth age 20-22 and high school graduates not enrolled in college generally had the highest asking wages.

Race differences in the asking wage were minimal. In general, white males had higher asking wages than minority males, but black and Hispanic females sought more than white females.

Table 5.7 Job Seekers' Desired Minimum Wage Rate, Days Per Week, and Hours per Day, Presented for Employed and Unemployed Youth, by Selected Characteristics

Characteristic	Mean wage rate			Days per week			Hours per day		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
	Employed[a]								
Age									
16-17	2.99	3.21	3.10	4.8	5.1	5.0	6.5	6.9	6.7
18-19	3.35	4.34	3.89	5.0	5.2	5.1	7.4	7.9	7.6
20-22	3.83	4.85	4.35	4.7	5.0	4.8	7.6	8.2	7.9
Race									
Black	3.66	4.15	3.95	5.1	5.2	5.1	7.4	7.7	7.6
Hispanic	3.51	4.27	3.91	4.9	5.2	5.1	6.9	7.9	7.4
White	3.40	4.25	3.83	4.8	5.1	5.0	7.2	7.8	7.5
Enrollment status									
High school dropout	3.15	4.20	3.88	5.1	5.2	5.2	7.8	8.2	8.1
High school student	2.96	3.34	3.17	4.8	5.2	5.0	6.4	6.8	6.6
College student	3.68	4.44	4.01	4.7	4.9	4.8	7.0	8.0	7.4
Nonenrolled high school graduate	3.65	4.91	4.27	5.0	5.1	5.0	7.8	8.2	8.0
Total	3.43	4.24	3.85	4.9	5.1	5.0	7.2	7.8	7.5
	Unemployed[b]								
Age									
16-17	2.88	3.06	2.97	5.0	5.0	5.0	5.8	6.4	6.1
18-19	3.20	3.60	3.38	5.1	5.2	5.1	7.3	7.5	7.4
20-22	3.12	4.18	3.55	5.0	5.0	5.0	7.1	7.8	7.4
Race									
Black	3.16	3.41	3.28	5.2	5.1	5.2	7.1	7.2	7.1
Hispanic	3.10	3.33	3.22	5.1	5.4	5.2	6.8	6.6	6.7
White	3.01	3.47	3.22	5.0	5.0	5.0	6.5	7.0	6.7
Enrollment status									
High school dropout	3.18	3.61	3.38	5.2	5.4	5.3	7.5	8.4	7.9
High school student	2.90	3.05	2.98	5.0	5.0	5.0	5.8	6.3	6.0
College student	3.03	3.82	3.40	5.0	4.5	4.8	6.1	6.4	6.3
Nonenrolled high school graduate	3.19	4.29	3.56	4.9	5.1	5.0	7.6	7.9	7.7
Total	3.05	3.45	3.23	5.0	5.1	5.1	6.7	7.0	6.8

[a] UNIVERSE: Employed civilians age 16-22 on interview date who were looking for other work. (N=3,370,000)

[b] UNIVERSE: Civilians age 16-22 who were unemployed on interview date. (N=3,410,000)

However, the asking wages of females showed less variation by age or enrollment status than did those of males.

Asking Wages of Teenage Males: A Special Analysis

A special analysis of the employment problems of male teenagers based on the NLS youth data appeared to suggest that black unemployed male teenagers may have unrealistically high asking wages as compared to the wage rates that their employed peer group are earning in the labor market. The white male teenage unemployment rate was 17.6 percent in 1979; the corresponding rate for blacks was 43.2 percent. Considering that the labor force participation rate of blacks is lower than that of whites (71.3 percent for whites vs. 65.9 percent for blacks), the proportion of working black teenage males is much smaller than that of whites. That is, approximately 60 percent of the white teenage male population, but less than 40 percent of the black teenage male population, is working. Although both racial groups suffer from a high probability of being unemployed, public concern is primarily drawn to the remarkable differentials in the unemployment rates between the two races.[5]

The NLS data and other studies consistently show that black teenage male unemployment rates are substantially higher than the comparable white unemployment rates, regardless of their enrollment and educational attainment status. The gaps in unemployment rates between the two races have not narrowed for high school graduates and college enrollees as compared with those for high school dropouts and high school enrollees, respectively. In other words, among white male teenagers, high school graduates have substantially lower unemployment rates than high school dropouts and enrollees. Although a similar tendency is apparent among black male teenagers, the reduction in unemployment rates is considerably smaller for graduates, indicating that labor market gains due to educational attainments are much smaller for blacks than for whites. Alternatively, once white teenage males attain a certain degree of educational status (e.g., high school graduation), they do not face a severe labor market problem. However, corresponding black teenage males continue to have problems even when they graduate.

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[5] In order to represent the population means, sampling weights (which are an inverse of the probability of being selected) for each individual are used for the tabular analysis. However for the regression analysis in this section, unweighted estimation was performed.

For both races the unemployment rates among teenagers enrolled in school are consistently higher than among those not enrolled in school. Since students have restricted hours of work and must work in areas accessible to school, their higher unemployment rates are expected. But it is surprising that approximately 70 percent of unemployed boys are currently enrolled in school--that is, only 30 percent of unemployed boys are not enrolled in school. Furthermore, over 90 percent of these unemployed teenage students are in high school.

Employed white teenage males are earning 15 cents more per hour than unemployed white teenage males want in order to go to work, but unemployed blacks want 11 cents more per hour than employed blacks are earning (Table 5.8). The blacks' asking

Table 5.8 Mean Wage (in Dollars) of Employed Male Teenagers and Mean Asking Wage of Unemployed Male Teenagers, by Enrollment Status and Educational Attainment Status

Enrollment status	Black	White
	Total	
Mean wage	3.26	3.47
Mean asking wage	3.37	3.32
	Enrolled	
Mean wage	3.09	2.98
Mean asking wage	3.22	3.21
High school student		
Mean wage	3.07	2.85
Mean asking wage	3.18	3.13
College student		
Mean wage	3.15	3.53
Mean asking wage	3.79	4.03
	Not enrolled	
Mean wage	3.49	4.21
Mean asking wage	3.73	3.58
High school dropout		
Mean wage	3.42	3.86
Mean asking wage	3.70	3.47
High school graduate		
Mean wage	3.57	4.41
Mean asking wage	3.79	3.82

UNIVERSE: Civilian black and white males age 16-19.

wages were also 5 cents per hour higher than the whites'. These differences seem to imply that blacks have unrealistically high asking wages. However, the average wage of employed whites was 21 cents per hour higher than that of blacks, and it may be that unemployed blacks are just increasingly unwilling to labor for lower wages when they know whites are getting more. Furthermore, as shown above, the black graduate is not enjoying as great a payoff for education as is the white graduate. Among those who are looking for work the educational attainments of blacks are, on the average, higher than those of whites, and this fact may also explain the relatively high asking wages of blacks.

Surprisingly, out-of-school white teenage males, unlike blacks and in-school white teenage males, have asking wages lower than the mean wages of their employed peers. The unemployment of this group may be due to unavailability of jobs.

Although both the mean wages and asking wages of black high school students are higher than the comparable wages of white high school students, an opposite pattern is observed for college students; white college students earn more and ask higher wages than their black counterparts. These comparisons were made by stratifying the employed and the unemployed groups according to their enrollment and educational attainment status. To control for the effects of some specific variables such as quality of the respondents, equations were estimated for each youth to show what an employed person with his characteristics is likely to earn (imputed wage).[6]

Approximately 80 percent of the entire unemployed group were found to have asking wages higher than their imputed wages: that is, only about 20 percent of the total job-seeking teenage males asked lower wages than those which teenagers with similar individual characteristics were actually earning in the labor market (Table 5.9). The percentage having higher asking wages was somewhat greater for whites (82 percent) than for blacks (75 percent).

Fewer white and black teenage out-of-school males had higher asking wages than imputed wages than those in school: 88 percent and 79 percent of in-school white and black teenage males asked higher wages than their imputed wages; 68 percent and 63 percent of out-of-school white and black teenage boys had higher asking wages than their imputed wages. Among whites attending school, more high school students than college students had higher asking than imputed wages, while the reverse was true for blacks. For both races, more high school dropouts than high school graduates asked higher wages than their imputed wages.

The absolute size of the differential between asking and imputed wages also varied somewhat. Blacks showed a slightly smaller difference between asking and imputed wages than whites: 63 cents for blacks and 67 cents for whites. Out-of-

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[6] For the discussion of estimating wage equations for other cohorts (e.g., females), see Shapiro and Mott (1978). Sandell (1979) examines the determinants of the asking wages for females and uses a similar technique although the issues under discussion are different from mine. For a detailed methodological discussion about sample selection bias problems, see Heckman (1976, 1979).

Table 5.9 Proportion Whose Asking Wages Are Higher Than Their Imputed Wages and Mean Values for Wage Differences between Asking and Imputed Wages, by Enrollment Status and Educational Attainment

Characteristic	Black		White	
	DWAGE > 0 (percent)	Mean values of DWAGE[a]	DWAGE > 0 (percent)	Mean values of DWAGE[a]
Total	75	0.63 (1.44)	82	0.67 (1.36)[c]
Quality measure[b]				
Low	82	0.70 (1.51)	86	0.77 (1.54)
Middle	53	0.35 (1.10)	82	0.52 (0.96)
High	47	0.68 (1.32)	59	0.65 (1.41)
Ever worked[d]	73	0.56 (0.90)	83	0.69 (1.09)
Socioeconomic status[e]				
Low	75	0.56 (1.05)	79	0.79 (1.59)
High	73	1.07 (2.83)	88	0.42 (0.56)
Enrolled	79	0.61 (1.49)	88	0.65 (1.40)
Quality measure				
Low	83	0.63 (1.60)	93	0.83 (1.71)
Middle	58	0.23 (0.47)	87	0.30 (0.36)
High	77	1.71 (1.43)	63	0.95 (1.59)
Ever worked	78	0.53 (0.77)	88	0.56 (0.87)
Socioeconomic status				
Low	77	0.46 (0.92)	85	0.80 (1.74)
High	88	1.37 (2.99)	91	0.42 (0.52)
High school student	78	0.56 (1.50)	90	0.62 (1.37)
College student	88	1.12 (1.18)	63	0.95 (1.59)
Not enrolled	63	0.70 (1.29)	68	0.72 (1.27)
Quality measure				
Low	79	0.91 (1.13)	72	0.64 (1.02)
Middle	45	0.60 (1.77)	70	1.11 (1.59)
High	25	-0.06 (0.51)	56	0.35 (1.12)
Ever worked	60	0.67 (1.17)	75	0.89 (1.34)
Socioeconomic status				
Low	69	0.81 (1.29)	68	0.79 (1.33)
High	0	-0.52 (0.30)	67	0.37 (0.75)
High school dropouts	79	0.88 (1.12)	70	0.77 (1.34)
High school graduates	29	0.34 (1.59)	65	0.61 (1.09)

[a] DWAGE = Asking Wage - Imputed Wage, in dollars.

[b] Quality measure is a combined construct of a knowledge of the world of work test score (KOWW) and educational attainment (EDATT). "Low" represents KOWW < 7 and EDATT < 12; "middle" includes KOWW < 7 and EDATT ≥ 12, or KOWW ≥ 7 and EDATT < 12; and "high" indicates KOWW ≥ 7 and EDATT ≥ 12.

[c] Numbers in parentheses represent the coefficients of variation defined as standard deviation divided by mean value.

[d] "Ever worked" comprises the individuals who have work experience since Jan. 1, 1978.

[e] Socioeconomic status is proxied by the highest educational attainments of either parent (EDPAR). "Low" indicates EDPAR ≤ 12, "high" indicates EDPAR ≥ 13.

UNIVERSE: Unemployed civilian black and white males age 16-19.

school teenagers showed a slightly higher difference than those in school: among white teenagers, the difference between asking and imputed wages for out-of-school boys was seven cents above that for those in school; among blacks this difference was nine cents.

An inverse association appeared between the proportion of those with higher asking than imputed wages and the quality of individuals as measured by the knowledge of the world of work test score and educational attainments, and this pattern prevailed for both races regardless of schooling status.[7] Among males of both races at the low end of the quality spectrum, about 85 percent asked wages in excess of their imputed wages, but among those at the high end of the quality spectrum, less than 60 percent of whites and less than 50 percent of blacks asked higher wages than they could expect to be paid.

Thus a too high asking wage relative to imputed wage turned out to be more of a problem for in-school teenagers than for those out of school and for those belonging to the lower end of the quality distribution than for those belonging to the upper end.

High Asking Wages and the Probability of Unemployment

The greater the difference between the asking and imputed wage, the greater is the probability of unemployment,[8] especially for those in school.[9] These findings are true for both white and black teenagers.

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[7] The pattern for enrolled blacks was curvilinear.

[8] A logit analysis was used to estimate the probability of being unemployed using the difference between the asking wage and the imputed wage (DWAGE) as

In order to show the direct impact of the effect of high asking wages on the probability of being unemployed, partial derivatives of unemployment probability with respect to DWAGE were computed and are reported in Table 5.10. Four typical teenagers were configured: two white and two black male teenagers, one sixteen years old and one nineteen years old for each race. They were assumed to have average characteristics of their respective races. Initially each individual was assumed to have a 60-cent difference between asking and imputed wages, the mean value for teenagers. Decreases in this difference by 20 cents, 40 cents, and 60 cents reveal how the unemployment probability of an individual with certain characteristics will vary as the asking wage is adjusted downward and/or the market wage for that individual increases for some reason.

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one of the independent variables. A positive DWAGE coefficient was found for all four race-enrollment status groups and the coefficients were statistically significant. For these estimations, DWAGE is used instead of the imputed wage of an individual. This is because wages are a function of various personal attributes, so that what is actually relevant in the decision making is the differential between the asking wage and the offered wage when all other factors are controlled for. Thus, for the employed persons, zero values are assigned for DWAGE indicating that their reservation wages are at an equal value to their offered wages. Thus, only the unemployed and those not in the labor force are assigned either positive or negative values for DWAGE depending upon their relevant wages. Actually, there may be some people among the employed whose reservation wages are below their offered wages, particularly among those people whose wages are decided by collective bargaining. Estimations of logit, probit and OLS wage equations appear in Appendix 5.

[9] The variable was more significant for the in-school equations than for the out-of-school unemployment equations. Furthermore, the magnitude of the coefficient was also larger for the in-school than for the out-of-school equations.

Table 5.10 Predicted Probabilities and Partial Derivatives of Unemployment with Respect to DWAGE[a]

Activity	Individual			
	A	B	C	D
Enrolled				
Probability, $\hat{p}$, (60)[b]	.97	.96	1.00	.98
$\hat{p}$ (40)	.85	.81	.99	.96
$\hat{p}$ (20)	.47	.41	.97	.91
$\hat{p}$ (0)	.12	.10	.93	.81
Not enrolled				
Probability, $\hat{p}$, (60)[b]	.61	.28	.76	.57
$\hat{p}$ (40)	.46	.17	.68	.48
$\hat{p}$ (20)	.31	.10	.59	.38
$\hat{p}$ (0)	.19	.06	.50	.30

[a] The characteristics of the four typical individuals, A, B, C, and D, are as follows:

TEENAGER	A	B	C	D
RACE	White	White	Black	Black
AGE	16	19	16	19
EDPAR	12	12	11	11
SIBLINGS	4	4	5	5
KOWW	6	6	5	5
ROTTER	8	8	9	9
EDATT	9	12	9	12
EDASP	14	14	14	14
DUMHSG	0	1	0	1
UR78ST	4.5	4.5	10.5	10.5
HEALTH	0	0	0	0
MARRIED	0	0	0	0
DISCRM	0	0	0	0
SOUTH	0	0	0	0
DWAGE	60	60	60	60

[b] Numbers in parentheses represent the amount of DWAGE.

UNIVERSE: Civilian black and white males age 16-19.

At given individual characteristics, for both whites and blacks, the predicted unemployment probabilities are substantially higher for those in school than for those out of school: if an individual's asking wage is higher than his market wage by 60 cents and he is enrolled in school, he is almost certainly unemployed; if he is not enrolled in school, he has a 28 to 76 percent probability of being unemployed, depending upon his age and race. Higher unemployment probabilities appear for blacks than for comparable whites regardless of age and enrollment status, especially among 19 year old out-of-school males--28 percent for whites versus 57 percent for blacks.

There are remarkable racial differences in the way unemployment probability changes when the difference between asking and imputed wages is reduced, particularly among the nonenrolled teenagers. Among whites, as the gap between asking wage and the imputed wage abates from 60 cents to zero, unemployment probability decreases by 85 percentage points for the enrolled and about 20 to 40 percentage points for the nonenrolled. The corresponding figures for blacks are about 10 percentage points and 25 percentage points, respectively. The extreme insensitivity of in-school black teenage unemployment probability is not readily explainable.

V. WILLINGNESS TO WORK

Much recent discussion ascribes the high and increasing rates of unemployment among black and other minority youth to their reluctance to accept menial employment.[10] To test this hypothesis and to determine more generally the willingness of youth to work, the 1979 NLS Survey of Youth asked young people whether they would be willing to accept a full-time job in seven occupations at $2.50, $3.50 and $5.00 an hour.[11] The occupations included five in the private sector that are often available to youth--washing dishes, working in a factory, working as a cleaning person, working at a check-out counter in a supermarket, and working at a hamburger place--and two which are representative of government programs begun under the Youth Employment and Demonstration Projects Act of 1977--cleaning up neighborhoods and working in a national forest or park.[12] These questions allow us to determine what types of jobs youth are most likely to accept and to ascertain whether the characteristics and backgrounds of young people influence their asking wages for given jobs.[13]

Overall, working in a national forest or park, at a supermarket check-out counter, and at a hamburger place are the most attractive of the occupations as shown by the greater

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[10] See, for example, Anderson and Sawhill, 1980, pp. 64-87.

[11] Persons who were enrolled in school were asked if they would accept such full-time jobs if offered during the following summer, while nonenrolled youth were asked if they would accept such jobs immediately.

[12] The former is a major activity of the Youth Community Conservation and Improvement Program, while the latter occurs in the Young Adult Conservation Corps.

[13] These questions constitute one of two measures of reservation wage available in the NLS. They allow comparisons across youth of the wages they would accept for identical jobs. The other measure seeks the lowest wage which would be accepted for the specific occupation that youth engaged in job search are seeking.

percentages of youth who would accept such jobs at each wage level (Table 5.11).[14] Young women leaned more toward jobs in supermarkets while young men were more willing to work in factories, cleaning neighborhoods and in national forests and parks. Minorities appeared less predisposed than whites to work at the two government sector occupations;[15] their relative unwillingness indicates that these programs may have problems attracting many of the youth for whom they were designed.

Minority-White Differences

More black youth were willing to work at $2.50 an hour in all five occupations in the private sector, and fewer black youth would not work at $5.00 an hour than was true of both Hispanic and white youth.

Weighted regression analysis was employed to determine if these differences held when a number of socioeconomic, environmental, and other differences between minority and white youth that influence willingness to work were controlled.[16]

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[14] The percentages in Table 5.11 must be altered to find this, e.g., for washing dishes 21% would accept the job at $2.50 per hour, 41% would do so at $3.50 and 62% would wash dishes for $5.00.

[15] An exception was the willingness of blacks to clean up neighborhoods.

[16] Independent variables, in addition to race were: age, sex, educational attainment; enrollment status; marital status; parents' educational level; poverty status; employment status; test scores on knowledge of the world of work, Rotter, and work ethic scales; educational aspirations; work experience in 1978; region of the country; state unemployment rate; percent of county which is urban; percent of county's employed in manufacturing; personal income level in the county; percent of families in the county who are poor; and month of interview. Each of these was found to significantly affect willingness to work at the given wage rates. Constructed variables are described in the chapter glossary.

Table 5.11 Willingness to Work, by Sex and Race

(Percentage distributions)

Willingness to work	Sex		Race			Total
	Female	Male	Black	Hispanic	White	
Washing dishes						
Willing to work at $2.50 per hour	21	21	34	24	18	21
Willing to work at $3.50 per hour but not at $2.50 per hour	19	21	23	22	19	20
Willing to work at $5.00 per hour but not at $3.50 per hour	22	21	19	18	22	21
Not willing to work at $5.00 per hour	39	38	24	35	41	38
Total percent	100	100	100	100	100	100
Working in a factory						
Willing to work at $2.50 per hour	17	22	32	23	17	20
Willing to work at $3.50 per hour but not at $2.50 per hour	24	25	32	30	23	25
Willing to work at $5.00 per hour but not at $3.50 per hour	24	24	19	20	25	24
Not willing to work at $5.00 per hour	34	29	17	27	34	31
Total percent	100	100	100	100	100	100

Table 5.11 (continued)

Willingness to work	Sex		Race			Total
	Female	Male	Black	Hispanic	White	
Working as a cleaning person						
Willing to work at $2.50 per hour	20	20	28	21	18	20
Willing to work at $3.50 per hour but not at $2.50 per hour	18	19	22	20	12	18
Willing to work at $5.00 per hour but not at $3.50 per hour	23	22	21	19	23	22
Not willing to work at $5.00 per hour	40	40	28	40	42	40
Total percent	100	100	100	100	100	100
Working at a check-out counter at a supermarket						
Willing to work at $2.50 per hour	38	29	45	37	31	33
Willing to work at $3.50 per hour but not at $2.50 per hour	31	22	29	30	26	26
Willing to work at $5.00 per hour but not at $3.50 per hour	16	18	14	15	18	17
Not willing to work at $5.00 per hour	16	30	12	19	25	23
Total percent	100	100	100	100	100	100

Table 5.11 (continued)

Willingness to work	Sex		Race			Total
	Female	Male	Black	Hispanic	White	
Working at a hamburger place						
Willing to work at $2.50 per hour	32	29	44	33	28	31
Willing to work at $3.50 per hour but not at $2.50 per hour	22	20	26	25	20	21
Willing to work at $5.00 per hour but not at $3.50 per hour	16	16	13	14	17	16
Not willing to work at $5.00 per hour	30	35	17	29	35	32
Total percent	100	100	100	100	100	100
Cleaning up neighborhoods						
Willing to work at $2.50 per hour	20	24	23	18	23	22
Willing to work at $3.50 per hour but not at $2.50 per hour	18	19	21	19	18	19
Willing to work at $5.00 per hour but not at $3.50 per hour	20	22	23	21	21	21
Not willing to work at $5.00 per hour	40	35	33	42	38	38
Total percent	100	100	100	100	100	100

Table 5.11 (continued)

Willingness to work	Sex		Race			Total
	Female	Male	Black	Hispanic	White	
Working away from home in a national forest or park						
Willing to work at $2.50 per hour	36	40	30	30	40	38
Willing to work at $3.50 per hour but not at $2.50 per hour	17	18	19	16	18	18
Willing to work at $5.00 per hour but not at $3.50 per hour	16	20	21	18	18	18
Not willing to work at $5.00 per hour	31	21	30	36	24	26
Total percent	100	100	100	100	100	100

UNIVERSE: Civilians age 14-21 on January 1, 1979. (N=32,867,000)

These analyses were made for willingness to accept each occupation at $2.50 and $5.00 an hour.[17]

Black youth showed significantly greater willingness to take all five of the private sector jobs at $2.50 and at $5.00 an hour. There was little difference between Hispanic and white youth.[18]

When the youth were asked about the two types of work that are parts of the federal government youth employment and training programs, somewhat different reactions were found. When compared to whites, fewer blacks and Hispanics would clean up neighborhoods at $2.50 an hour, although about the same percentage of blacks and whites would take such jobs when offered $5.00 an hour. (Hispanics, however, would be more reluctant to accept this work at $5.00 an hour than would either blacks or whites.)[19] Significantly lower proportions of blacks and Hispanics would be willing to go to national forests and parks to work on conservation projects at $2.50 an hour, and more of both groups, particularly Hispanics, would have to be paid over $5.00 an hour to attract them to this type of work.[20] Thus, even after controlling for many other factors, it appears that at least some of the government job opportunities for youth are less attractive to blacks and Hispanics than to whites.

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[17] Persons who indicated willingness to work at $2.50, $3.50 and $5.00 an hour are included in the latter group. Separate analysis of those willing to take the jobs at $3.50 was omitted since the results differed little from acceptance at the other two wage rates.

[18] Hispanic youth appear less willing to take jobs as cleaning persons.

[19] A conjecture for the lower willingness of minority youth to accept these jobs is that they live in more rundown neignborhoods and they may be more aware of the nature of such work.

[20] Minorities are more heavily concentrated in urban areas and may be less familiar with this type of work. They also may fear increased discrimination if they leave their home surroundings.

Sex Stereotyping

Some sex stereotyping was found in the willingness of the youth to take various jobs. More of the single men than women were willing to take factory jobs, neighborhood clean up jobs and the work in the parks, at each of the two wage levels; although the differences were not overwhelming, more women than men preferred jobs at the supermarket check-out counter and in a hamburger place. The largest difference, in willingness to work at $5.00 an hour at the check-out counter of a supermarket, was only 14 percentage points. The differences between sexes for dishwashing and cleaning jobs were not statistically significant.

Family Background Differences

Economic theory would lead one to expect somewhat greater willingness of youth from poor families to take employment at both of the wage rates. This theory held for six of the seven types of employment at $2.50 an hour, but in the case of the work in a national forest or park, poverty status seems to make little difference. At $5.00 an hour, there were fewer significant differences based on poverty status than at $2.50 an hour.

Further, youth from families where at least one parent had graduated from high school are slightly less likely than youth from families where neither parent had graduated to be willing to take all but the parks jobs at the high wage and three of the seven jobs at $2.50 an hour.

Differences by Employment Status

In all seven job categories, unemployed youth age 16-21 were more willing to work at both $2.50 and $5.00 an hour than were youth classified as out of the labor force (OLF). The latter were, in turn, more willing to work at $2.50 an hour than currently employed youth in all of the seven job categories and in four of the seven occupations at $5.00 an hour. Thus, we have the expected hierarchy--the unemployed, those out of the labor force and the employed. Those who are seeking work will accept jobs at low wages; higher wage rates are necessary to induce those out of the labor force to participate; and even higher wage rates would be needed to move the employed to new jobs.

Enrollment Status and Human Capital Differences

Predictably, college and, to a lesser extent, high school students were more willing to accept the various jobs at $2.50 an hour than those youth who were out of school.[21] College students were particularly more willing to work washing dishes and at a hamburger place while high school students were more interested in the supermarket jobs.

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[21] It should be remembered that the enrolled respondents were asked about taking the jobs "next summer." One would expect these youth to be less selective and have a lower reservation wage for what would be viewed as temporary employment than youth who were seeking regular employment, other things held constant.

As could be expected from human capital theory, the more able persons indicated willingness to work at higher wages. The better educated youth were consistently less willing to accept the various jobs at $2.50 an hour (except for work in the parks) and at $5.00 an hour (except for park and factory work). More of the high school dropouts and students would accept all of the jobs at $5.00 an hour, with factory work appearing especially attractive among the dropouts at this wage. Similarly, those with higher scores on a test of knowledge of the world of work, a scale which has been found to be correlated with intelligence,[22] exhibited less willingness to work at the two wage rates in the private sector jobs. Finally, those youth with work experience in 1978 were less likely to accept these jobs at $2.50 an hour, although this was not the case at the $5.00 an hour wage rate.[23]

Differences by Economic Environment

One would expect urban youth would be less willing to take the private sector jobs at given wage rates than would rural youth, holding the other variables constant, because the local "social minimum wage" (i.e., the community standard of acceptable wage rates[24]) would be higher. Likewise, the more manufacturing in the area, the higher would be the expected wage scale that sets the social minimum wage and, therefore, the less willing youth would be to take jobs at a given wage rate. Other the other hand, the higher the local level of unemployment the greater should be the willingness of youth to work at lower wages. These expectations are borne out in the data at $2.50 an hour.[25]

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[22] See Griliches, 1976.

[23] This may indicate that youth with work experience, while having higher reservation wage rates, also have a greater commitment to the labor force.

[24] See Reder, 1955, for an explanation of the social minimum wage.

One also would expect the social minimum wage to be higher in those counties where per capita income is high. The resulting negative relationship between willingness to work and a given wage was observed at both $2.50 and $5.00 an hour.[26] Finally, youth in the Northeast and North Central states were generally more willing to take the jobs at the two wage rates, although the differences were not significant in many cases.

Subminimum Wages

Large proportions of youth would be willing to accept jobs at amounts below the minimum wage. Although the offer to work at $2.50 an hour was approximately 86 percent of the minimum wage at the time of the interview, at least 20 percent of the youth would be willing to take each of the seven jobs (see Table 5.12). As one would expect, the willingness to accept subminimum wages was inversely related to age.[27] Thus, over one-third of the youth 14

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[25] At $5.00 an hour the variables had the expected signs (with two exceptions), but the coefficients were not always significant.

[26] It was found that the greater the percent of families in poverty in the country, controlling for other factors, the less was the youth's willingness to work. This may have been due to greater acceptance of welfare payments in these areas but this is merely conjecture.

[27] In the regression analysis willingness to work at each wage rate decreased one to three percentage points with each year of age.

Table 5.12 Willingness to Work, by Age

(Percentage distributions)

Willingness to work	Age				Total
	14-15	16-17	18-19	20-22	
Washing dishes					
Willing to work at $2.50 per hour	42	24	13	8	21
Willing to work at $3.50 per hour but not at $2.50 per hour	21	27	19	13	20
Willing to work at $5.00 per hour but not at $3.50 per hour	18	22	24	21	21
Not willing to work at $5.00 per hour	19	27	44	57	38
Total percent	100	100	100	100	100
Working in a factory					
Willing to work at $2.50 per hour	36	23	13	9	20
Willing to work at $3.50 per hour but not at $2.50 per hour	23	31	27	19	25
Willing to work at $5.00 per hour but not at $3.50 per hour	20	23	27	25	24
Not willing to work at $5.00 per hour	20	23	32	47	31
Total percent	100	100	100	100	100
Working as a cleaning person					
Willing to work at $2.50 per hour	36	24	13	9	20
Willing to work at $3.50 per hour but not at $2.50 per hour	23	22	17	13	18
Willing to work at $5.00 per hour but not at $3.50 per hour	22	23	24	21	22
Not willing to work at $5.00 per hour	21	31	46	57	40
Total percent	100	100	100	100	100

Table 5.12 (continued)

Willingness to work	Age				Total
	14-15	16-17	18-19	20-22	
Working at a check-out counter in a supermarket					
Willing to work at $2.50 per hour	61	41	21	14	33
Willing to work at $3.50 per hour but not at $2.50 per hour	21	32	30	22	26
Willing to work at $5.00 per hour but not at $3.50 per hour	10	14	21	22	17
Not willing to work at $5.00 per hour	8	12	27	41	23
Total percent	100	100	100	100	100
Working at a hamburger place					
Willing to work at $2.50 per hour	64	38	16	11	31
Willing to work at $3.50 per hour but not at $2.50 per hour	20	27	22	15	21
Willing to work at $5.00 per hour but not at $3.50 per hour	9	15	21	19	16
Not willing to work at $5.00 per hour	8	20	41	55	32
Total percent	100	100	100	100	100
Cleaning up neighborhoods					
Willing to work at $2.50 per hour	37	27	16	11	22
Willing to work at $3.50 per hour but not at $2.50 per hour	20	24	18	14	19
Willing to work at $5.00 per hour but not at $3.50 per hour	20	21	24	20	21
Not willing to work at $5.00 per hour	23	28	42	54	38
Total percent	100	100	100	100	100

Table 5.12 (continued)

Willingness to work	Age				Total
	14-15	16-17	18-19	20-22	
Working away from home in a national forest or park					
Willing to work at $2.50 per hour	51	46	33	24	38
Willing to work at $3.50 per hour but not at $2.50 per hour	12	19	222	17	18
Willing to work at $5.00 per hour but not at $3.50 per hour	15	16	19	23	18
Not willing to work at $5.00 per hour	22	19	26	35	26
Total percent	100	100	100	100	100

UNIVERSE: Civilians age 14-21 on January 1, 1979. (N=32,867,000)

to 15 years old would accept each of the jobs and in the case of working at a hamburger place or at a supermarket check-out counter, over 60 percent would accept the jobs at subminimum wages. For 18 and 19 year olds, the percentages declined substantially, but even in this age group over one million youth say that they would be willing to take each of these seven jobs at a wage approximately one-seventh below the minimum wage.

VI. SUMMARY

Nearly 30 percent of all youth 16-21 years of age had looked for a job during the last four weeks when interviewed in 1979. Approximately half of these young people were unemployed. Need for money was the reason cited by most of the youth for seeking employment, but the majority of these youth are not in substantial financial need: over half are in school, three-fourths live at home with their parents and only one in nine has been married. Financial need seemed to be more important for minorities since over half the minority job seekers were in families with incomes below $10,000. Moreover, among unemployed females, one third of blacks and one fifth of Hispanics had had children.

As would be expected, among the unemployed youth the 16 and 17 year olds and those who were in school were primarily seeking part-time jobs, while those out of school sought full-time work. The job seekers tended to look for work in entry level occupations. Occupational segregation patterns tended to persist: the males were primarily seeking service, labor, operative and craftspersons jobs, while the females sought clerical, service and sales work. Youth had been searching for these jobs for nearly two months, yet more than half of the youth had used only a single method to seek employment. The method used most often by far was contacting employers directly; the second most used method was examining the newspapers.

The wage rates for the jobs that the unemployed were seeking varied considerably by enrollment status, age and sex. High school students, the majority of whom were 16 and 17 year olds, were seeking jobs paying close to the minimum wage. Women who had left high school were seeking jobs that paid on average 10 to 30 cents more than the minimum wage. Unemployed males who were out of high school sought substantially higher wages--approximately 70 cents to $1.40 more than the minimum wage. A special analysis of the young males 16-19 years of age showed that approximately 80 percent were seeking a wage higher than that paid to employed youth with similar characteristics. The difference was particularly substantial for those young men who had relatively poor qualifications for the labor market, i.e., the high school dropouts and those with less knowledge of the world of work. Further, it appears that if the boys, in particular the whites, would lower their asking wage, their probability of employment would increase.

There was little difference in the asking wages of black and white youth or in the discrepancies between their asking wages and wages of comparable youth who are employed. Reducing the asking wage rates of the black young men, however, did not appear to substantially increase their probability of being employed.

While black youth may be searching for certain types of jobs, they are also willing to take lower paying jobs. In examining five common private sector jobs, it is found that black youth are substantially more willing to take each of the jobs at a given wage rate than are white youth, even when holding constant human capital, family background and environmental variables. We also find that substantial numbers of young people, particularly 14-17 year olds, are willing to work at less than the minimum wage. A substantial degree of sex stereotyping still exists among youth in their willingness to take various types of jobs.

Table 5A.1 Logit Estimates of Unemployment Probability for Black and White Teenage Males, by Enrollment Status[a]

	Enrolled		Not enrolled	
	Blacks	Whites	Blacks	Whites
Constant	-2.385 (1.35)	-1.937 (1.15)	1.147 (0.43)	.200 (0.13)
Age	.078 (0.72)	.146 (1.29)	-.197 (1.42)	-.038 (0.46)
Parental educational attainment	.0004 (0.01)	-.006 (0.21)	.020 (0.41)	-.012 (0.45)
Siblings	.009 (0.35)	.013 (0.35)	.052 (1.46)	.061 (1.83)
Knowledge of the world of work	.032 (0.77)	.025 (0.64)	.086 (1.37)	.023 (0.56)
Rotter score	.002 (0.05)	.038 (1.35)	.092 (1.91)	.055 (1.66)
Highest grade completed	.031 (0.31)	-.281 (2.69)	.046 (0.42)	-.091 (1.24)
Educational aspirations	.012 (0.33)	.016 (0.44)	-.003 (0.06)	-.015 (0.33)
High school diploma	-.883 (2.72)	.284 (1.04)	.024 (0.07)	-.317 (1.27)
Unemployment rate in state	.018 (0.51)	.110 (1.80)	-.009 (0.24)	.008 (0.11)
Health status	-.019 (0.06)	.276 (0.68)	1.050 (1.77)	.095 (0.26)
Discrimination	.143 (1.01)	.004 (0.03)	-.392 (1.73)	.073 (0.46)
South	-.195 (0.86)	.334 (2.02)	-.091 (0.32)	-.012 (0.06)
DWAGE	.0221 (5.74)	.0455 (9.62)	.0095 (3.12)	.0156 (4.88)
Log of likelihood function	-148.2	-199.6	-70.78	-153.9
Number of respondents	281	602	141	407
Chi-square (13.D.F.)	92.936	258.476	40.584	98.287

[a]Numbers in parentheses represent asymptotic t-values.

UNIVERSE: Civilian black and white males who were in the labor force and who were age 16-19.

Table 5A.2 Probit Estimations for Employment Probability

Variable	Blacks		Whites	
	Maximum likelihood estimates	Asymptotic t-stats	Maximum likelihood estimates	Asymptotic t-stats
CONSTANT	.8216	0.48	-.7360	0.69
AGE	-.0420	0.39	-.1057	1.47
EDPAR	.0227	0.66	.0027	0.16
SIBLING	.0085	0.33	.0123	0.55
KOWW	.0227	0.57	.0128	0.49
EDATT	.0276	0.30	.2401	3.55
EDASP	-.0516	1.33	-.0126	0.51
DUMHSG	.5280	1.93	-.6448	3.53
UR78ST	-.0673	2.07	-.1002	2.37
HEALTH	-.1990	0.61	-.8819	3.14
DISCRM	.0285	0.20	.0855	0.92
SOUTH	-.5556	2.64	-.3469	3.09
FULL	5.9294	0.22	5.7887	0.55
UNION	5.6694	0.12	5.0895	0.29
TENURE	5.8124	0.36	1.3474	12.32
EXPER	-.2077	1.08	-.0375	0.31
DUMIS	-.2498	0.93	.1299	0.68
2 TIMES LOG LIKELIHOOD RATIO	506.20		1017.53	
Number of respondents	684		1,467	
N(Dep = 1)	246		807	
N(Dep = 0)	438		660	

Table 5A.3 Least Squares Estimates of Wage Equations With or Without Lambda (λ)[a]

Variable	Blacks		Whites	
	Estimations with lambda (λ)	Estimations without lambda (λ)	Estimations with lambda (λ)	Estimations without lambda (λ)
CONSTANT[b]	3.6982 (6.20)	3.8693 (6.60)	4.8016 (13.26)	4.8203 (13.41)
AGE	.0714 (2.01)	.0688 (1.93)	.0362 (1.62)	.0371 (1.67)
KOWW	.0238 (1.75)	.0243 (1.78)	.0117 (1.38)	.0115 (1.35)
EDATT	.0630 (2.05)	.0592 (1.93)	.0120 (0.60)	.0106 (0.54)
EDASP	-.0040 (0.32)	-.0045 (0.36)	.0057 (0.72)	.0056 (0.71)
DUMHSG	-.1331 (1.58)	-.1184 (1.41)	.0589 (1.09)	.0631 (1.19)
UR78ST	.0057 (0.47)	.0056 (0.46)	-.0004 (0.03)	.0001 (0.00)
HEALTH	.0995 (0.75)	.1056 (0.80)	-.0691 (0.69)	-.0678 (0.67)
SOUTH	.0244 (0.32)	.0168 (0.22)	-.0203 (0.54)	-.0190 (0.51)
FULL	.0359 (0.49)	-.0176 (0.28)	.0931 (1.70)	.0773 (1.83)
UNION	.1774 (2.16)	.1614 (1.98)	.2499 (5.43)	.2430 (5.59)
TENURE	-.0120 (0.46)	-.0299 (1.31)	.0061 (0.39)	.0023 (0.17)
EXPER	-.0039 (0.08)	-.0073 (0.16)	.0197 (0.70)	.0183 (0.66)
DUMIS	-.0982 (1.27)	-.1104 (1.43)	-.1231 (2.44)	-.1254 (2.50)
LAMBDA (λ)[c]	.07163 (1.46)		.0215 (0.46)	
R^2	.1794	.1710	.1804	.1802
S.E.E.	.3603	.3612	.4003	.4001
N	221	221	730	730

[a] The dependent variable takes a logarithmic form. Numbers in parentheses represent t-statistics.

[b] Adding variables such as marital status and educational attainments or parents did not improve the R^2 of wage equations. A small number of teenagers working in the agricultural sector or self-employed were excluded from estimating wage equations.

[c] For a detailed discussion and implication of lambda (λ), see Heckman (1976, 1979), Fligstein and Wolf (1978).

Chapter 5 Glossary

NOTE: Unless otherwise indicated, all information pertains to the date of interview.

AGE
A continuous variable measuring the age of the respondent (in years).

BLACK
See "race."

CLEANING UP NEIGHBORHOODS
See "willingness to work."

COLLEGE STUDENT
See "school enrollment status."

DISCRIMINATION (DISCRM)
A binary variable coded one if the respondent feels that he/she is discriminated against because of race, sex, nationality, or age but not because of other factors such as low skill, inexperience, etc.; zero otherwise.

EDUCATIONAL ASPIRATIONS (EDASP)
A continuous variable measuring the highest grade or year of regular school (i.e., elementary school, high school, college, or graduate school) that the respondent would like to complete. The range is 1-18.

EMPLOYED
See "employment status."

EMPLOYMENT STATUS
A series of binary variables:

EMPLOYED
Coded one if the respondent is employed, zero otherwise.

OUT OF LABOR FORCE
Coded one if the respondent is not in the labor force, zero otherwise.

UNEMPLOYED
Coded one if the respondent is unemployed, zero otherwise.

EXPERIENCE (EXPER)
A continuous variable measuring the number of years since the respondent left school minus "tenure."

FEMALE
See "sex."

FULL-TIME (FULL)
A binary variable coded one if the respondent is employed full-time, zero

otherwise.

HEALTH STATUS
A binary variable coded one if the respondent has a health problem that limits the amount or kind of work he/she can do, zero otherwise.

HIGHEST GRADE COMPLETED (EDATT)
A continuous variable measuring the highest grade completed by the respondent as of the date of interview (or as of May 1, 1979 for respondents interviewed after May 1, 1979). The range is 0-18.

HIGH SCHOOL DIPLOMA (DUMHSG)
A binary variable coded one if the respondent has a high school diploma, zero otherwise.

HIGH SCHOOL STUDENT
See "school enrollment status."

HISPANIC
See "race."

IN SCHOOL (DUMIS)
A binary variable coded one if the respondent is enrolled in school, zero otherwise.

KNOWLEDGE OF THE WORLD OF WORK (KOWW)
A continuous variable measuring the respondent's knowledge of the world of work. The range is 0-9.

MALE
See "sex."

MARITAL STATUS - SEX
A series of binary variables:

MARRIED FEMALE
Coded one if the respondent is female and married with spouse present, zero otherwise.

MARRIED MALE
Coded one if the respondent is male and married with spouse present, zero otherwise.

UNMARRIED
Coded one if the respondent is not married with spouse present, zero otherwise.

MARRIED
A binary varaible coded one if the respondent is married, zero otherwise.

MARRIED FEMALE
See "marital status - sex."

MARRIED MALE
See "marital status - sex."

MARRIED FEMALE
See "marital status - sex."

MONTH OF INTERVIEW
A continuous variable indicating the month in which the respondent was interviewed. The range is January to May, 1979 (coded 1-5, respectively).

NONENROLLED HIGH SCHOOL GRADUATE
See "school enrollment status."

NORTH CENTRAL
See "region."

NORTHEAST
See "region."

OUT OF LABOR FORCE
See "employment status."

PARENTAL EDUCATIONAL ATTAINMENT (EDPAR)
A continuous variable measuring the highest number of years of schooling completed by either of the respondent's parents. In the analysis of willingness to work, this variable takes the form of a series of binary variables:

PARENTAL EDUCATIONAL ATTAINMENT AT LEAST 12 YEARS
Coded one if either of the respondent's parents completed at least the twelfth grade, zero otherwise.

PARENTAL EDUCATIONAL ATTAINMENT LESS THAN 12 YEARS
Coded one if neither of the respondent's parents completed the twelfth grade, zero otherwise.

PARENTAL EDUCATIONAL ATTAINMENT NOT AVAILABLE
Coded one if information on educational attainment is not available for either of the respondent's parents, zero otherwise.

PER CAPITA INCOME IN COUNTY (IN THOUSANDS)
A continuous variable measuring per capita money income in the respondent's county in 1974, in thousands of dollars. (Source: City-County Data Book.)

PERCENT EMPLOYED IN MANUFACTURING IN COUNTY
A continuous variable measuring the percent of the employed civilian labor force in the respondent's county who worked in manufacturing in 1970. (Source: City-County Data Book.)

PERCENT OF FAMILIES IN POVERTY IN COUNTY
A continuous variable measuring the percent of families in the

respondent's county who were living below the poverty level in 1969. (Source: City-County Data Book.)

POVERTY STATUS

A series of binary variables:

IN POVERTY

Coded one if the respondent was living in poverty in 1978, as defined by the Current Population Survey; coded zero if not or if information on the respondent's 1978 poverty status is not available.

NOT IN POVERTY

Coded one if the respondent was not living in poverty in 1978; coded zero if he/she was living in poverty then or if information on his/her 1978 poverty status is not available.

POVERTY STATUS NOT AVAILABLE

Coded one if information on the respondent's 1978 poverty status is not available, zero otherwise.

PERCENT URBAN IN COUNTY

A continuous variable measuring the percent of the population in the respondent's county in 1970 who lived in an urban area. (Source: City-County Data Book.)

RACE

Race of respondent. In the multivariate analysis this variable takes the form of a series of binary variables:

BLACK

Coded one if the respondent is black, zero otherwise.

HISPANIC

Coded one if the respondent is Hispanic, zero otherwise.

WHITE

Coded one if the respondent is neither black nor Hispanic, zero if he/she is either black or Hispanic.

REGION

A series of binary variables (NORTH CENTRAL, NORTHEAST, SOUTH, and WEST) coded one if the respondent resides in the Census region after which the variable was named, zero otherwise.

ROTTER SCORE

A continuous variable measuring the respondent's perception of locus of control in his/her life. The range is 4-16, a score of 4 meaning that the respondent feels himself to be very much in control of his life, a score of 16 meaning he feels the locus of control to be largely external to him. The variable is based on the four questions in the original Rotter Scale that were worded in the first person.

SEX

Sex of respondent. In the multivariate analysis this variable takes the form of a pair of binary variables:

FEMALE

Coded one if the respondent is female, zero if male.

MALE

Coded one if the respondent is male, zero if female.

SCHOOL ENROLLMENT STATUS

A series of binary variables:

COLLEGE STUDENT

Coded one if the respondent is enrolled in college (as of the date of interview*); zero otherwise.

NONENROLLED HIGH SCHOOL GRADUATE

Coded one if the respondent has graduated from high school but is not enrolled in college (as of the date of interview*); zero otherwise.

SCHOOL DROPOUT (NO HIGH SCHOOL DIPLOMA)

Coded one if the respondent has no high school diploma and is not enrolled in school; zero otherwise.

SIBLINGS

A continuous variable measuring the number of siblings the respondent has, plus one.

SOUTH

See "region."

TENURE

A continuous variable measuring the number of years the respondent has been working at his/her current job.

UNEMPLOYED

See "employment status."

UNEMPLOYMENT RATE IN COUNTY

A continuous variable measuring the annual average unemployment rate in the respondent's county in 1970. (Source: City-County Data Book.)

UNEMPLOYMENT RATE IN STATE (UR78ST)

A continuous variable measuring the annual average unemployment rate in the respondent's state in 1978. This variable is race-sex specific.

UNION MEMBER

A binary variable coded one if the respondent is in a labor union, zero otherwise.

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*Or as of May 1, 1979 for respondents interviewed after that date.

UNMARRIED
See "marital status - sex."

WASHING DISHES
See "willingness to work."

WEST
See "region."

WHITE
See "race."

WILLINGNESS TO WORK

CLEANING UP NEIGHBORHOODS

WASHING DISHES

WORKING AS A CLEANING PERSON

WORKING AT A CHECK-OUT COUNTER IN A SUPERMARKET

WORKING AT A HAMBURGER PLACE

WORKING AWAY FROM HOME IN A NATIONAL FOREST OR PARK

WORKING IN A FACTORY

A series of variables, each with four possible codes: willing to take the job at $2.50 per hour; willing to take the job at $3.50 an hour but not at $2.50 an hour; willing to take the job at $5.00 an hour but not at $3.50 an hour; not willing to take the job at $5.00 an hour. Nonstudents were asked if they would take the job immediately; students were asked if they would take the job the following summer. In the multivariate analysis the variables take the form of a series of binary variables coded one if the respondent would accept the job and zero if not. Two wage rates were used in the multivariate analysis: $2.50 an hour and $5.00 an hour.

WORK COMMITMENT
A binary variable coded one if the respondent would work if he/she (and his/her spouse) were to get enough money to live comfortably without working, zero otherwise.

WORKED AT ALL DURING 1978
A binary variable coded one if the respondent worked at all during 1978, zero otherwise.

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CHAPTER 6

EXPERIENCES IN HIGH SCHOOL AND COLLEGE

by Russell W. Rumberger*

I. INTRODUCTION

Through the development of skills, values, and attitudes, the education system plays an important role in preparing youth for entry into the labor market. In more recent times this role has expanded as technological advances and a growing economy have increased the demand for a highly skilled work force. Consequently, participation in formal schooling has risen dramatically since the Second World War, especially at the secondary and postsecondary levels (Suter, 1979).

The educational system also plays a part in promoting equality of opportunity. It has long been recognized that variations in adult economic status--especially between whites and blacks and between men and women--are attributable, at least in part, to differences in educational attainments and experiences. Because of the important role that education plays in determining adult status in the labor market, the federal government has initiated a number of compensatory education programs that attempt to improve the labor market opportunities of minorities and other disadvantaged groups. Examining the current educational experiences of youth may provide an indication of whether these programs are likely to improve the future labor market opportunities of youth.

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*I would like to thank Tim Brown and Julie Zavakos for their expert research assistance and the staff at the Center for Human Resource Research for their helpful comments.

In 1979 two-thirds of all youth (persons 14 to 21 years old on January 1, 1979) were enrolled in school (Table 6.1). Of those, three-quarters were enrolled in high school and one-quarter were enrolled in college. Participation was lower for Hispanic youth than for black and white youth; it was also lower for females than for males. Racial differences appear in the level of school attended--minority youth were more likely to be enrolled in high school, while whites were more likely to be attending college. Children from families living below the poverty level were less likely to attend school than children from more advantaged backgrounds.

These differences suggest that the educational experiences of youth vary by race, sex, and family background.[1] The remainder of this chapter examines these differences in greater detail, focusing on two levels of formal schooling--high school and college.[2] At the high school level, we will examine attitudes toward school, performance in school, programs and courses taken in school, and dropping out of school; at the

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[1] In the descriptive analysis, family background is indexed by poverty status of a person's family and parental education. The latter represents the highest grade of regular school completed by the father if the respondent was living with the father at age 14; otherwise it represents the highest grade completed by the respondent's mother.

[2] The majority of youth in this age range who are enrolled below the college level are enrolled in high school--grades 9 through 12. A few, however, are enrolled below the high school level. In this chapter the discussion of high school students is restricted to current students who are enrolled in grades 9 through 12.

Table 6.1 Enrollment Status, by Sex, Race, Age, Poverty Status, and Region

(Percentage distributions)

Characteristic	Enrolled			Not Enrolled			Total	
	Below college	In college	Total	High school graduate	High school dropout	Total	Percent	Number (thousands)
Race and sex								
Black	53	12	65	20	15	35	100	4,514
Female	50	14	64	22	14	36	100	2,311
Male	56	10	66	17	17	34	100	2,203
Hispanic	50	11	61	16	23	39	100	2,073
Female	47	11	58	18	24	42	100	1,042
Male	54	10	64	14	22	36	100	1,031
White	48	17	65	25	10	35	100	26,292
Female	47	16	63	28	9	37	100	13,090
Male	51	17	68	22	10	32	100	13,202
Age								
14-15 years	98	0	98	0	2	2	100	7,299
16-17 years	89	1	90	1	9	10	100	8,286
18-19 years	19	30	49	33	18	51	100	9,074
20-21 years	1	29	30	55	15	70	100	9,074
Poverty status								
Below poverty	49	13	62	16	22	38	100	4,932
Above poverty	51	16	67	25	8	33	100	27,947
Region								
Northeast	49	18	67	25	8	33	100	7,003
North central	50	15	65	26	9	35	100	10,028
South	50	15	65	21	14	35	100	10,489
West	47	16	63	24	13	37	100	5,359
Total	49	16	65	24	11	35	100	32,879

UNIVERSE: Civilian noninstitutional population 14 to 21 years old on January 1, 1979. (N=32,879,000) college level, participation in college, field of study, and sources of financial aid.

II. HIGH SCHOOL

Students' experiences in high school vary greatly. Some finish high school with adequate preparation to enter the labor market or college; others find little value in their classes and coursework and, consequently, may be inadequately prepared for future work or school. Still others fail to finish high school altogether. Thus students experiences in high school--as reflected in their attitudes toward school, the courses they take, their performance, and whether they receive a diploma--provide an indication of future opportunities for continued schooling and meaningful employment.

Attitudes toward School

The general public has a rather low opinion of public education. In 1978 only 35 percent of adults felt that public schools were doing a very good job, a decline of 12 percent since 1974 (Elam, 1978: 337). Parents cite lack of discipline as the biggest problem in schools today (Elam, 1978: 336). Teachers in high schools agree; they view student discipline and attitudes as the biggest hindrance to their performance (Plisko and Noell, 1978: 56). The public also feels that schools need better teachers (Elam, 1978: 340). Principals cite other problems with students--absenteeism, cutting classes, and apathy (Abramowitz et al., 1978: 88). But how do students view their schools? Table 6.2 shows the proportion of students who agree with a series of

Table 6.2 Attitudes Toward School, by Race and Sex: High School Students

Attitudes toward school[a]	Female				Male				Total
	Black	Hispanic	White	Total	Black	Hispanic	White	Total	
1. It's easy to make friends at this school.	89	89	94	93	92	93	97	96	95
2. Most of the teachers are willing to help with personal problems.	76	77	79	78	81	77	81	81	79
3. Most of my classes are boring.	52	50	53	53	42	52	54	52	52
4. I don't feel safe at this school.	18	17	11	13	16	16	7	9	11
5. Most of my teachers really know their subjects well.	85	85	91	90	91	90	93	92	91
6. You can get away with almost anything at this school.	17	20	27	25	15	23	28	26	26
7. My school work requires me to think to the best of my ability.	94	90	84	86	91	85	80	82	84
8. At this school, a person has the freedom to learn what interests him or her.	86	86	88	87	87	83	90	89	88
9. This school offers good job counseling.	75	84	80	79	77	80	81	80	80
10. Overall satisfaction with school.	86	90	87	87	86	88	89	89	88

[a] Percent who felt the statement was somewhat or very true.

UNIVERSE: Civilian noninstitutional population 14 to 21 years old enrolled in grades 9 to 12. (N=15,092,000)

statements about their schools.

Students find school both good and bad. On the one hand, most students find the academic environment challenging, teachers helpful and knowledgeable, and counseling adequate. The majority also feel that they can make friends easily. On the other hand, one-quarter of all students said they "can get away with almost anything" in school; over one-tenth do not feel safe at their school; more than half find their classes boring. Overall, however, students are quite satisfied with school.

Attitudes vary somewhat within race and sex groups. Males more than females, and whites more than minorities find it easy to make friends at school. Whites are more likely to feel that their classes are boring. A larger proportion of females and minorities find schools unsafe. Whites more than minorities feel that "they can get away with almost anything" at school. Finally, white students are less challenged by their school work than minority students.

Programs and Courses

The curriculum students follow in school can be classified into three types--college preparatory, vocational, and general. Although the distinctions among program categories are rather ambiguous,[3] evidence suggests that program differences not only reflect differences in students' abilities and backgrounds, but also explain differences in opportunities after school. Students in college preparatory programs, for example, are often more able and come from more advantaged backgrounds than other students; moreover, they perform better in school and are more likely to go to college (Alexander, et. al., 1978; Kolstad, 1979). Students in vocational programs, while they are generally similar in ability and background to general students, in some cases perform better in the labor market after leaving school (Grasso and Shea, 1979).

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[3] It is especially difficult to differentiate true vocational students from students who occasionaly take vocational courses. See Brown and Gilmartin (1980) and Wiley and Harnischfeger (1980).

In 1979 over half of all high school students identified their program as general, one-third as college preparatory program, and about one-seventh as vocational (Table 6.3).[4] These patterns varied little within race and sex groups.[5] Variations by social origins were pronounced, however. Students from families living below the poverty level were less likely to be in college preparatory programs than other students; students with parents who failed to finish high school were twice as likely to be in a vocational program and less than half as likely to be in a college preparatory program as students whose parents completed college.

While race and sex differences in program areas were

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[4] Respondents were asked to indentify their program as vocational, commercial, college preparatory, or general. The vocational and commercial categories were combined in this analysis.

[5] These figures contrast somewhat with estimates by Grasso and Shea (1979:8) based on earlier NLS data for young men in 1966 and young women in 1968. They found a larger proportion of whites than blacks in college preparatory programs and a larger proportion of black males than white males in vocational and commercial programs. Overall their estimates show higher proportions of high school students in college preparatory and vocational programs and fewer students in general programs than the present estimates.

Table 6.3 High School Program, by Race, Sex, Poverty Status, and Parental Education: High School Students

(Percentage distributions)

Characteristic	Vocational	College preparatory	General	Total	
				Percent	Number (thousands)
Sex and race					
Female	14	32	54	100	7,229
Black	16	31	53	100	1,086
Hispanic	13	31	56	100	453
White	14	33	53	100	5,690
Male	15	34	51	100	7,863
Black	16	29	55	100	1,147
Hispanic	15	30	55	100	513
White	15	35	50	100	6,203
Poverty status					
Below poverty	16	22	62	100	1,977
Above poverty	14	34	52	100	13,115
Parental education					
Elementary school	18	23	59	100	2,490
High school					
1-3 years	19	21	60	100	2,505
4 years	16	32	52	100	5,524
College					
1-3 years	11	39	50	100	1,856
4 years	9	50	41	100	1,630
5 years or more	3	59	38	100	1,087
Total	15	33	52	100	15,092

UNIVERSE: Civilian noninstitutional population 14 to 21 years old enrolled in grades 9 to 12. (N=15,092,000)

slight, significant race and sex appear in the types of vocational programs taken. Overall the majority of vocational students were in business and trade areas, with the remainder scattered among agriculture, distributive education, health, home economics, and miscellaneous other programs (Table 6.4). The majority of females were concentrated in business or office programs, while a majority of males were pursuing trade or industrial programs. Further, Hispanic females were nearly twice as likely to be in business or office programs as white females. White males were more likely to follow programs in the more potentially lucrative areas of trades and industry, while minority males were more likely to take business or office programs. These findings illustrate that even at a relatively early age, race and sex differences in career paths begin to emerge.

The types of courses students take in high school vary as well as the programs they follow. In the 1978-79 academic year, about 60 percent of students' courses were in academic subjects, 20 percent were in vocational subjects, and 20 percent were in general subjects (Table 6.5).[6] English and mathematics were the most common academic subjects; business and trades were the most

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[6] Respondents were asked what courses they were taking or had taken during the current or last academic year. The responses were open-ended and subsequently coded into categories. The task of collapsing the categories was problematic since two different coding schemes were used during the coding process. Furthermore, the two schemes were not strictly compatible, especially regarding vocational and commercial courses. In the present tables, the business or office category includes regular business courses as well as vocational courses in office occupations; the trade and industry category includes vocational courses in this area as well as regular industrial arts courses.

Table 6.4 Type of Vocational Program, by Race and Sex: High School Students in a Vocational Curriculum

(Percentage distributions)

Type of vocational program	Female				Male				Total
	Black	Hispanic	White	Total	Black	Hispanic	White	Total	
Agricultural	3	0	1	2	2	5	9	8	5
Business or office	42	70	59	57	17	20	9	11	32
Distributive education	14	2	15	14	12	14	10	10	12
Health	10	8	6	6	4	8	1	2	4
Home economics	13	7	3	5	7	0	1	2	4
Trade or industrial	16	10	10	11	53	48	65	62	38
Other	2	3	6	5	5	5	5	5	5
Total percent	100	100	100	100	100	100	100	100	100
Total number (thousands)	173	58	797	1,028	190	79	949	1,218	2,246

UNIVERSE: Civilian noninstitutional population 14 to 21 years old enrolled in a high school vocational curriculum. (N=2,246,000)

Table 6.5 Courses Taken in Current Academic Year, by Race and Sex: High School Students

(Percentage distributions)

Courses	Female				Male				Total
	Black	Hispanic	White	Total	Black	Hispanic	White	Total	
Academic	60	60	58	58	61	62	60	60	59
English	35	34	34	34	35	33	34	34	34
Foreign language arts	4	7	7	6	2	6	4	4	5
Mathematics	19	19	17	17	21	22	19	19	18
Natural sciences	15	15	15	15	15	14	16	15	15
Social sciences	27	25	26	26	26	25	27	27	27
Total percent	100	100	100	100	100	100	100	100	100
Vocational or commercial	19	15	18	18	15	15	18	17	18
Agriculture	2	1	2	2	7	4	7	7	4
Distributive education	4	2	5	4	4	2	4	4	4
Health	3	1	1	1	1	0	0	0	1
Home economics	33	26	27	28	12	5	4	5	17
Business or office	49	60	53	53	25	22	24	24	38
Technical	1	1	1	1	3	2	2	2	2
Trade and industry	8	6	9	9	47	62	55	55	32
Other	2	3	2	2	2	3	3	3	2
Total percent	100	100	100	100	100	100	100	100	100
General	21	25	24	24	24	23	22	23	23
Total percent	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,086	453	5,690	7,229	1,147	513	6,203	7,863	15,092
Mean number of courses	6.5	6.9	7.0	6.9	6.4	6.5	6.7	6.6	6.8

UNIVERSE: Civilian noninstitutional population 14 to 21 years old enrolled in grades 9 to 12. (N=15,092,000)

common vocational subjects. Students took an average of seven courses during the academic year.

Although differences in the types of courses taken in school varied little between whites and minorities, differences between men and women were more pronounced. The proportion of academic courses were similar, but females generally took more courses in foreign languages than males, while males took more mathematics courses than females. In the vocational area, women took the majority of their courses in home economics and business, while men took a majority of theirs in business and trades.

As one might expect, differences in high school programs reflect differences in the kind of courses taken. Yet students often want to take or are required to take courses in a number of areas. In the 1978-79 academic year, vocational students took over half of their courses in academic subjects, while college preparatory students took one-eighth of their courses in vocational areas (Table 6.6). Vocational students took more of their academic courses in English and social sciences, while students in college preparatory programs took more academic courses in foreign languages and mathematics. In the vocational area, general program students took more courses in home economics; vocational students took more courses in agriculture, distributive education, and trades; college preparatory students took more of their vocational courses in business. The fact that overall differences in courses taken by students in different program areas are not great suggests that program categories reveal little about students' preparation in school.

Table 6.6 Courses Taken in Current Academic Year, by High School Program: High School Students

(Percentage distributions)

Courses	High school program			Total
	Vocational	College preparatory	General	
Academic	51	65	58	59
English	42	30	35	34
Foreign language arts	2	10	3	5
Mathematics	15	19	19	18
Natural sciences	10	17	16	15
Social sciences	31	24	27	27
Total percent	100	100	100	100
Vocational or commercial	28	12	18	18
Agriculture	5	3	5	4
Distributive education	6	4	3	4
Health	1	1	1	1
Home economics	9	12	21	16
Business or office	36	48	35	39
Technical	2	2	2	2
Trade and industry	38	29	31	32
Other	3	2	2	2
Total percent	100	100	100	100
General	21	22	24	23
Total percent	100	100	100	100
Total number (thousands)	2,249	4,965	7,878	15,092
Mean number of courses	6.2	7.1	6.7	6.8

UNIVERSE: Civilian noninstitutional population 14 to 21 years old enrolled in grades 9 to 12. (N=15,092,000)

Delayed Education

Not everyone progresses through school at the same rate. For a variety of reasons--boredom, learning problems, lack of ability, emotional problems--some children fall behind. As a result, they are enrolled below the modal grade--the grade in which most other students their age are enrolled. Falling behind in school could have serious consequences--impairing learning and increasing the likelihood of dropping out of school (McNally, 1977; Hill, 1979).

Overall about 6 percent of all high school students were 2 or more years behind in school in 1979 (Table 6.7).[7] But 13 percent of black students and 15 percent of Hispanic students were behind in school, compared to only 5 percent of white students. Although the rate of falling behind among minority students has decreased in the last two decades, their improvement has been less than the improvement among white students (U.S. Commission on Civil Rights, 1978: 8). Within race groups, a somewhat higher proportion of males than females were at least 2 years behind in school.

Delayed schooling is related to other individual characteristics as well. Of course, students over the age of 17 who are still enrolled in high school are much more likely to be

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[7] Since the majority of interviews were conducted in February, March, and April 1979, some students had a birthday since the beginning of the school year. For example, many students attending 12th grade were 18 when interviewed, while the modal grade for age 17 is 12, based on October CPS estimates (U.S. Bureau of the Census, 1979: 49). Thus estimates of years behind modal grade may be too high for some students. To avoid overstating delayed schooling, only figures for 2 years or more behind modal grade are reported.

Table 6.7 Years Behind Modal Grade of Enrollment, by Sex, Race, Age, Poverty Status, and Parental Education: High School Students

(Percentage distributions)

Characteristic	0-1 years behind	2 or more years behind	Total	
			Percent	Number (thousands)
Race and sex				
Black	87	13	100	2,233
Female	90	10	100	1,086
Male	84	16	100	1,147
Hispanic	85	15	100	966
Female	88	12	100	453
Male	83	17	100	513
White	95	5	100	11,893
Female	97	3	100	5,690
Male	94	6	100	6,203
Age				
14-15 years	99	1	100	6,112
16-17 years	94	6	100	7,305
18-21 years	72	28	100	1,675
Poverty status				
Below poverty	83	17	100	1,977
Above poverty	95	5	100	13,115
Parental education				
Elementary	87	13	100	2,490
High school				
1-3 years	89	11	100	2,505
4 years	95	5	100	5,524
College				
1-3 years	97	3	100	1,856
4 years	98	2	100	1,630
5 years or more	99	1	100	1,087
Total	94	6	100	15,092

UNIVERSE: Civilian noninstitutional population 14 to 21 years old enrolled in grades 9-12. (N=15,092,000) behind. The socioeconomic status of a student's family is particularly important--students from families living below the poverty level were almost four times as likely as other students to be behind in school; students with parents who failed to complete high school were more than twice as likely to be behind in school as students whose parents completed high school. In general, the higher the educational attainment of the parents, the lower the likelihood of falling behind in school.

Dropping Out

Dropping out of high school creates problems for both individuals and society. Dropouts severely limit their opportunities for further education and training, thus reducing their chances for success in the labor market (King, 1977; Hill, 1979). Dropouts constitute a social burden as well, since they are more likely to require public assistance and to engage in criminal activities (Levin, 1972; Ehrlich, 1975). Although dropout rates have generally declined since the beginning of the century, several states have reported rising dropout rates in recent years (Camp, 1980; Kaeser, 1980).

How widespread is the dropout problem currently? Table 6.8 shows the proportion of high school dropouts among 14 to 21 year olds within age, race, and sex groups.[8] More than one out of ten youths were high school dropouts in 1979. For whites the

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[8] High school graduates are persons who reported having either a high school diploma or equivalent (GED). In most cases they also reported having completed 12 years or more of regular schooling, although some GED holders reported having completed fewer than 12 years. Dropouts are individuals who were not enrolled in school and were not high school graduates at the time of interview.

Table 6.8 Dropout Rates,[a] by Age, Sex, and Race

Sex and race	14 to 15 years old	16 to 17 years old	18 to 19 years old	20 to 21 years old	Total
Black	2	10	24	25	15
Female	2	8	22	20	14
Male	1	12	25	30	17
Hispanic	2	17	36	35	23
Female	2	17	39	33	24
Male	3	18	32	38	22
White	2	8	16	12	10
Female	1	9	14	11	9
Male	2	8	17	13	10
Total	2	9	18	15	11

[a] Percentage of the population who are high school dropouts.

UNIVERSE: Civilian noninstitutional population 14 to 21 years old on January 1, 1979. (N=32,879,000) proportion was slightly lower--10 percent--while for minorities it was substantially higher--15 percent for blacks and 23 percent for Hispanics. Among whites and blacks, males had somewhat higher dropout rates than females; among Hispanics, females had slightly higher dropout rates. Dropout rates among 18 to 21 year olds were even higher--almost one of four black youths were dropouts in this age group and more than one out of three Hispanic youths failed to finish high school, compared to one out of seven for white youths.

The reasons students report leaving school vary widely (Table 6.9). Females, especially blacks, most often cite marriage and pregnancy as reasons for leaving school. Many dropouts, especially males, leave because they do not like school. Forty percent of Hispanic males drop out for economic reasons--home responsibilities, good job offers, or financial difficulties. Economic reasons are often cited by black and white males as well. Other reasons for leaving school include lack of ability, poor grades, and expulsions or suspensions.

Although the reasons that students cite for leaving school are revealing, the propensity to drop out is undoubtedly related to a number of individual characteristics and experiences. Perhaps the most widely studied factor is family background, which has proven to exert a strong influence on educational attainment generally (Sewell and Hauser, 1975). Several aspects of family background appear to influence the decision to drop out of school. The educational attainment of both parents represent two important factors (Hill, 1979; Mare, 1980). Better educated

Table 6.9 Reason for Leaving School, by Race and Sex: High School Dropouts

(Percentage distributions)

Reason for leaving school	Female				Male				Total
	Black	Hispanic	White	Total	Black	Hispanic	White	Total	
Getting married	4	15	17	14	0	3	3	2	8
Pregnancy	41	15	14	19	0	0	0	0	9
Lack of ability, poor grades	5	4	5	5	9	4	9	9	7
Other reasons didn't like school	18	15	27	24	29	26	36	33	29
Home responsibilities	8	8	6	6	4	13	4	5	6
Offer good job, chose to work	4	7	5	5	12	16	15	14	10
Financial difficulties couldn't afford to attend	3	9	3	4	7	9	3	5	4
Entered military	0	0	0	0	1	2	1	1	1
Expelled or suspended	5	1	2	2	18	6	9	10	7
School too dangerous	1	1	2	1	0	0	1	1	1
Moved away from school	0	6	5	4	3	3	3	3	3
Other	12	20	15	15	18	19	17	17	16
Total percent	100	100	100	100	100	100	100	100	100

UNIVERSE: Civilian noninstitutional population 14 to 21 years old not enrolled in school and without diploma or GED. (N=3,715,000) parents could influence their children's educational aspirations or they could spend more time with their children, thereby increasing their children's ability and likelihood of remaining in school (Hill and Stafford, 1977).

Income is another influencial aspect of family background. Because children from poor families may feel pressure to contribute to their families' income, they may be more likely to drop out of school and seek work (Masters, 1969; Mare, 1980). Family structure may also be important. Children from broken families--where one or both parents are absent--may be less likely to find the support and encouragement needed to keep them in school (Masters, 1969; Mare, 1980). Yet the absence of natural parents, in itself, may be less important than the financial difficulties that such a condition frequently implies (Shaw, 1980). Other aspects of family background--family size, housing conditions, geographic location--also affect the propensity to drop out of school (Masters, 1969; Mare, 1980).

Family background may exert its influence both directly and through its influence on other factors. Ability affects the likelihood of finishing school, yet ability is influenced by family background (Hill, 1979; Mare, 1980). Educational and occupational aspirations, which are also affected by family background, influence educational attainment as well. In addition, family background may influence performance and other experiences that contribute to educational achievement (Bachman, Green, and Wirtanen, 1971).

Early marriage and childbirth also affect the likelihood of leaving school prematurely, especially among women (Waite and Moore, 1978; Mott and Shaw, 1978). Environmental factors, such as geographic location of current residence and local employment conditions, may play an additional role. Finally, even when individual differences in family background and other characteristics are controlled, race and sex differences in the propensity to drop out of school are likely to remain.

Modelling procedures controlling for family background and other characteristics are presented in Appendix 6A. The likelihood of dropping out of high school is related to various aspects of family background, although some aspects are more important than others. Parental education and the presence of reading material in the home exert a fairly strong influence, but earnings do not (although the latter measure is only approximate). Some intervening variables--educational and occupational aspirations, ability, and the educational aspirations of one's friends--are also important factors. Second, the simulations indicate that observed differences in dropout rates, especially between white and minority youth, are largely due to the more disadvantaged family backgrounds of minorities. And third, certain factors affect the propensity to drop out more for some groups than for others--father's education affects the dropout rate for males but not females; local unemployment rates affect the dropout rates for minority males but not others; and early marriage and childbirth affect the dropout rate for females more than males. Although the decision to drop out of high school is undoubtedly complex and conditioned by a number of influences, these simulation have helped to assess the independent contributions of a number of imporant factors.

III. COLLEGE

Persons who go to college increase their chances of finding meaningful and rewarding jobs. College graduates benefit society as well, by supplying the skilled labor required for continued economic growth. Through programs designed to increase the participation of minorities and the disadvantaged, higher education also serves as a means of promoting equality of opportunity. This section examines the college experiences of youth--participation and its determinants, and, for current college students, field of study, types and tuition of colleges attended, attendance status, and sources of financial aid.

Participation

Historically, white males and the wealthy have participated in college more than other groups in society. In the last two decades, however, the proportion of minorities, women, and the poor attending college has increased (Noell, 1978: 116,120). Yet participation and, more importantly, educational outcomes are still far from equal (U.S. Commission on Civil Rights, 1978: Chapter 4).

In 1979 40 percent of all high school graduates 14 to 21 years old were enrolled in college (Table 6.10). Hispanics and whites had a 40 percent participation rate, while the rate for blacks was 37 percent. Males had higher participation rates among Hispanics and whites, but black females had higher participation rates than black males. College participation

Table 6.10 Enrollment Status, by Sex, Race, Age, Poverty Status, and Region: High School Graduates

(Percentage distributions)

Characteristic	In college	Not enrolled	Total	
			Percent	Number (thousands)
Race and sex				
Black	37	63	100	1,441
Female	38	63	100	831
Male	36	64	100	610
Hispanic	40	60	100	559
Female	39	61	100	312
Male	42	58	100	247
White	40	60	100	10,987
Female	37	63	100	5,779
Male	44	56	100	5,208
Age				
14-17 years	47	53	100	143
18-19 years	47	53	100	5,195
20-21 years	35	65	100	7,649
Poverty status				
Below poverty	44	56	100	1,481
Above poverty	40	60	100	11,506
Region				
North	43	57	100	2,935
North central	36	65	100	4,119
South	43	57	100	3,790
West	40	60	100	2,144
Total	40	60	100	12,987

UNIVERSE: Civilian noninstitutional population 14 to 21 years old who graduated from high school. (N=12,987,000) rates were higher for high school graduates under 20 years old than for those 20 to 21 years old. Surprisingly, participation rates were higher for children from families living below the poverty line than from families not in poverty.[9] Finally, a greater proportion of high school graduates in the Northeast and the South were attending college than graduates residing in the West and North Central states.

What factors influence the decision to attend college? As with other educational decisions, a number of factors may influence the decision to attend college. Various aspects of family background have been found to be important influences, particularly parental education, family income, and family size (Christensen, et al., 1975; Mare, 1980). Individual characteristics--ability, educational and occupational aspirations, and psychological makeup--also play a role in the decision, although these factors are also influenced by socioeconomic background (Kolstad, 1979; Reitzes and Mutran, 1980). Other factors contribute as well, including high school curriculum and college characteristics (Jackson, 1978; Alexander, et al., 1978). Finally, important race and sex differences appear, both in the determinants of participation and in participation rates.

In order to assess the influence of various factors on the decision to attend college, two models similar to the ones used to predict dropping out of high school were estimated. Again the first model contained family background measures and current geographic variables. The second model, in addition, contained the same set of intervening variables used previously with three added variables: two measures of high school curriculum--vocational and college preparatory--and a variable indicating whether the respondent had a GED. Complete descriptions of all variables are in the glossary at the end of this chapter. The models were estimated on the same six cohorts, with the sample in this case composed of 18 to 21 year old high school graduates. Means and standard deviations of the independent variables appear in Table 6B.1.

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[9] This could result from college students declaring themselves independent of their parents households, thus making them eligible for various forms of financial assistance.

Estimated probit coefficients and tests of significance appear in Tables 6B.2 and 6B.3. As in the previous case, two simulations were performed on each of the two models--one depicting an individual from an advantaged background, the other depicting an individual from a disadvantaged background. The values of the independent variables used in the simulations appear in Table 6B.4. Again the discussion below is limited to those variables that significantly affect the probability of attending college.

Actual and predicted probabilities together with partial derivatives of selected independent variables for the first model appear in Table 6 .11. Actual probabilities of attending college vary little among the six cohorts, ranging from 44 percent to 53 percent. Except for white and black males, the predicted probabilities of attending college for youths from advantaged

Table 6.11 Actual and Predicted Probabilities of College Enrollment and Partial Derivatives of Selected Background and Control Variables, by Race and Sex

Characteristic	Female			Male		
	Black	Hispanic	White	Black	Hispanic	White
Actual probability	52.9	52.4	48.4	43.9	48.9	51.4
Advantaged background						
Predicted probability	53.9	46.6	41.4	70.0	46.9	29.6
Partial derivatives						
Mother's education	4.5**	-0.2	4.5**	6.0**	2.6*	2.9**
Father's earnings	-1.2	2.5+	1.1**	2.6*	-1.4	1.5**
Father's education	-0.9	-1.1	3.9**	0.1	-0.6	2.7**
Number of siblings	0.7	-1.8	-2.0*	-2.2+	-1.1	-2.3**
Cultural index	5.1+	7.4+	9.3**	3.6	11.7*	12.0**
South[a]	25.8**	6.1	7.7	12.6	18.8	13.5+
Unemployment rate	0.4*	-0.0	0.1	0.0	-0.3	0.1
Disadvantaged background						
Predicted probability	43.8	28.9	24.0	46.8	28.2	13.9
Partial derivatives						
Mother's education	4.5**	-0.2	3.6**	6.9**	2.2*	1.9**
Number of siblings	0.8	-1.5	-1.6*	-2.5+	-0.9	-1.4**
Cultural index	5.1+	6.3+	7.5**	4.1	10.0*	7.7**
South[a]	28.0**	5.4	6.4	16.2	18.0	9.6+
Unemployment rate	0.4*	-0.0	0.1	0.0	-0.3	0.0

+ Probit coefficients significant at .10 level. From Tables 8.A7 and 8.A8.

* Probit coefficients significant at .05 level. From Tables 8.A7 and 8.A8.

** Probit coefficients significant at .01 level. From Tables 8.A7 and 8.A8.

[a] For qualitative independent variables, the partial derivatives actually represent the difference between the predicted probability with the independent variable set to zero and the probability with the independent variable set to one, with all other independent variables held constant.

backgrounds are similar to actual probabilities. For black males the predicted rate is much higher than the actual rate, while for white males the predicted rate is lower than the actual rate. The predicted probabilities of attending college for youths from disadvantaged backgrounds are lower than the probabilities for advantaged youths. With the same disadvantaged background, whites are less likely to attend college than minorities.

Several aspects of family background influence the likelihood of attending college, although the effects vary among the six cohorts. Except for Hispanic females, a one year increase in mother's education increases the probability of college attendance from 3 to 6 percentage points. Father's earnings exert a positive influence on the likelihood of going to college among all groups except Hispanic males and black females. Father's education exerts a positive influence and family size a negative influence among whites but not among minorities. A one unit increase in reading material (cultural index) increases the likelihood of attending college from 4 to 12 percentage points among the various groups. In general, the marginal effects of background variables are similar for advantaged and disadvantaged youths.

Several current geographic variables also influence the propensity to attend college. Black females and white females living in the South are more likely to attend college than members of these cohorts living elsewhere. Hispanic males residing in the central city are more likely to attend college than those residing in suburban or rural areas. White and black females living in rural areas are less likely to attend college than members of these cohorts residing in urban or suburban areas. An increase in the local unemployment rate increases the likelihood of black females attending college, but has no effect on other groups.

Actual and predicted probabilities and partial derivatives for selected intervening variables from the second model appear in Table 6.12. For youths from advantaged backgrounds with aspirations to complete college and friends with similar aspirations, the likelihood of attending college varies from 28 to 74 percent. The likelihood of attending college for youths from disadvantaged backgrounds, even with similar aspiration levels, remains much lower, ranging from 25 to 63 percent. The large variance in predicted probabilities suggests that a number of additional factors not included in the present models also influence the decision to attend college.

Several intervening variables exert a strong influence on the probability of attending college, especially among youths from disadvantaged backgrounds. Educational aspirations are particularly important--a one year increase in educational aspirations increases the likelihood of attending college from 11 to 19 percentage points. Except for black females, a one year increase in friends' educational aspirations increases the probability of attending college from 2 to 5 percentage points. Persons who aspire to professional or managerial employment at age 35 are more likely to attend college than those with other aspirations. For minorities, ability (as measured by knowledge

Table 6.12 Actual and Predicted Probabilities of College Enrollment and Partial Derivatives of Selected Intervening Variables, by Race and Sex

Characteristic	Female			Male		
	Black	Hispanic	White	Black	Hispanic	White
Actual probability	52.9	52.4	48.4	43.9	48.9	51.4
Advantaged background						
Predicted probability	41.7	27.6	73.5	48.4	57.8	44.8
Partial derivatives						
Vocational[a]	-5.6	0.2	-0.6	-20.8*	-28.7	-8.7
College prep[a]	27.1**	23.6*	11.1**	-5.6	12.1	22.0**
GED[a]	5.0	-26.6*	-21.8*	-37.9*	0.8	-24.5*
Educational aspirations	18.8**	15.7**	10.9**	11.9**	17.5**	15.1**
Friend's aspirations	-0.4	4.2+	3.6**	1.6	8.7**	3.3**
Aspire to prof. occ.[a]	5.0**	31.6**	7.7*	30.7**	9.5	19.8**
Rotter	1.1	2.4	1.3*	1.4	-2.2	-0.9
KWW	2.6	5.1+	0.1	5.1*	4.2	-0.1
Married early[a]	-30.7*	-26.3**	-45.2**	-48.0	-12.3	-17.1
Married later[a]	-23.5*	-20.5*	-19.4**	-38.2+	-42.6	-25.6**
Child early[a]	-28.0**	-7.1	-17.2	-17.4	-22.9	-44.8
Child later[a]	-26.4**	27.2	-16.9*	-2.2	12.0	-13.8
Disadvantaged background						
Predicted probability	38.9	24.6	61.5	42.5	32.2	28.2
Partial derivatives						
Vocational[a]	-5.5	-0.2	-0.7	-19.7*	-20.9	-7.1
College prep[a]	27.3**	23.0*	13.8**	5.6	12.3	21.4**
GED[a]	4.9	-23.8*	-23.0*	-34.4*	0.8	-17.8*
Educational aspirations	18.5**	14.8**	12.8**	11.7**	16.1**	12.9**
Friend's aspirations	-0.4	4.0+	4.2**	1.6	8.0**	2.8**
Aspire to prof. occ.[a]	22.6**	31.0**	9.4*	32.0**	9.4	19.0**
Rotter	1.1	2.3	-1.5*	1.4	-2.0	-0.7
KWW	2.5	4.8+	-0.1	5.0*	3.8	-0.1
Married early[a]	-29.2*	-23.6**	-43.4**	-42.2	-10.2	-13.2
Married later[a]	-22.6*	-18.7*	-20.7**	-34.7+	-27.7	-18.8**
Child early[a]	-26.7**	-6.6	-18.5	-16.6	-17.5	-28.2
Child later[a]	-25.3**	26.5	-18.2*	-2.1	12.2	-10.9

+ Probit coefficients significant at .10 level. From Tables 8.A7 and 8.A8.
* Probit coefficients significant at .05 level. From Tables 8.A7 and 8.A8.
** Probit coefficients significant at .01 level. From Tables 8.A7 and 8.A8.

[a] For qualitative independent variables, the partial derivatives actually represent the difference between the predicted probability with the independent variable set to zero and the probability with independent variable set to one, all other independent variables held constant.

of the world of work) exerts a positive influence. For most groups, marriage is a deterrent to college participation. Having a child is a deterrent for white and black females, but not for other groups.

In summary, these two models provide several insights into the determinants of college attendance. As in the case of dropping out of high school, minority youth with the same socioeconomic background as white youth have equal or greater likelihood of attending college. But even with the same background and personal characteristics, differences among groups remain. For example, an increase in father's education level increases the probability of attending for white youth but not minority youth; high educational aspirations increase the likelihood of college attendance for all groups, although the magnitude varies; aspirations for professional employment improve the chances of college attendance for everyone except Hispanic males. Of course these findings do not reveal the host of other factors that also play a role in this decision.

Other Choices

Once someone chooses to attend college, further decisions must be made: what kind of school to attend, whether to attend full-time or part-time, what area to study, and how to finance college. What choices do students make?

In 1979 the most popular fields of study were business, physical science, education, and social science (Table 6.13). Despite recent attempts to attract men and women into nontraditional fields of study, sex differences in college majors

Table 6.13 Field of College Study, Type of College, Tuition, and Attendance Status, by Race and Sex: College Students

(Percentage distributions)

Characteristic	Female				Male				Total
	Black	Hispanic	White	Total	Black	Hispanic	White	Total	
Field of college study									
Education	12	13	16	16	12	6	5	6	11
Engineering	1	1	1	1	10	10	12	12	7
Business	32	19	19	21	29	19	24	24	23
Social science	16	16	12	13	10	7	9	9	11
Physical science	10	15	10	10	12	11	18	17	14
Humanities and liberal arts	3	9	11	10	8	9	10	10	10
Fine and applied arts	4	4	7	6	8	7	6	6	6
Health professionals	15	16	13	13	3	3	2	2	8
Others	7	7	11	10	9	28	13	13	12
Total percent	100	100	100	100	100	100	100	100	100
Type of college									
Two-year	31	43	31	32	24	45	23	24	28
Four-year	69	57	69	69	76	56	77	76	72
Total percent	100	100	100	100	100	100	100	100	100
Full-time tuition (in dollars)	1166	1108	1503	1444	1501	1107	1652	1618	1533
Attendance status									
Full-time	92	80	90	89	85	80	91	90	90
Part-time	8	20	10	11	15	20	10	10	11
Total percent	100	100	100	100	100	100	100	100	100
Total number (thousands)	310	119	2142	2571	219	106	2266	2591	5162

UNIVERSE: Civilian noninstitutional population 14 to 21 years old enrolled in college. (N=5,162,000) remain strong: women are much more likely to major in education and health areas; men are much more likely to major in engineering and physical sciences. Race differences exist as well--blacks are more likely to major in business areas; whites are much more likely to study engineering and humanities.

About two-thirds of college students were attending four-year institutions, with the remainder attending two-year schools. There were some differences in the kind of schools attended--white and black males were more likely than other groups to attend four-year schools. Because many two-year schools have lower tuition than four-year schools, there were corresponding differences in the tuition of the schools attended by members of these groups: the average college tuition for men was higher than the tuition paid by women, and the tuition paid by whites was higher than that for other groups. Finally, the vast majority of youth were attending college full-time.

College participation is influenced by the availability of financial support (Jackson, 1978). In 1979 students availed themselves of a variety of financial aid services (Table 6.14). About one-half were using some form of institutional assistance, with loans, grants, and scholarships being the most common. The other major source of financial assistance was friends and relatives. About two-thirds of all college students received this form of financial assistance--more than one-quarter had all of their school and living expenses paid for, while another quarter had half or more of their expenses paid for. Some variations in these proportions appeared by race and sex: blacks

Table 6.14 Type of Financial Assistance in College, by Race and Sex

(Percentage distributions)

Type of financial assistance	Female				Male				Total
	Black	Hispanic	White	Total	Black	Hispanic	White	Total	
Any institutional financial assistance	80	65	45	50	66	52	43	45	48
Loans	28	24	23	23	31	26	20	21	22
Scholarship	16	19	20	20	27	14	19	20	20
Grant	74	46	21	28	52	35	16	20	24
Fellowship	1	2	0	0	2	0	0	0	0
Assistantship	5	0	2	2	3	0	1	1	1
Tuition waiver	1	7	3	3	1	3	2	2	3
Veteran's educational benefits	1	3	2	2	4	2	3	3	2
Military educational assistance	1	0	0	0	0	0	1	1	1
Other	8	7	6	6	9	4	10	9	8
Parental financial assistance	45	58	74	70	54	61	74	71	70
All schooling and living expenses	13	18	33	30	18	19	25	24	27
Half or more	19	21	27	26	12	22	32	30	28
Less than half	12	19	14	14	23	20	17	18	16

UNIVERSE: Civilian noninstitutional population 14 to 21 years old enrolled in college. (N=5,162,000) and Hispanics received grants much more frequently than whites; whites were much more likely than minorities to receive financial assistance from friends and relatives; and women had all schooling and living expenses paid for more often than men.

IV. SUMMARY AND CONCLUSIONS

What happens in school is likely to affect youth outside of school, both immmediately and in future years. Thus understanding the experiences and problems youth face in connection with school will aid our understanding of the many problems facing youth today. Since many people view schooling as a means of promoting equality of opportunity, it is particularly important to note differences in the school experiences of youth who differ by race, sex, and social origins. What do the present findings reveal?

At the high school level, one major problem concerns getting youth to finish school, particularly minority youth. Whereas 15 percent of white youth 18 to 21 years old failed to finish high school, 25 percent of black youth and 35 percent of Hispanic youth failed to do so. Children from poor families are almost 4 times as likely to drop out of school as other children. An examination of the factors related to dropout behavior reveals that socioeconomic background accounts for virtually all of the racial differences in observed dropout rates. Other factors also play a role, especially early marriage and childbirth.

Other high school experiences also vary by race, sex, and social origins. What curriculum a student follows in high school--vocational, college preparatory, or general--is influenced, in part, by a student's socioeconomic background. The type of vocational program followed in high schools shows marked race and sex differences. Achievement in school, as indexed by the proportion of students two grades or more behind the norm, varies by race and social origins. Students' attitudes toward school, on the other hand, are quite similar among race and sex groups--students report they are generally satisfied with school, yet many feel there is a lack of discipline.

Experiences at the college level are equally revealing, although disparities among groups are less pronounced. The proportion of high school graduates who go on to college varies little by race or sex. But social origins exert both direct and indirect effects on a young person's likelihood of attending college. Fields of study in college show marked differences by sex and less pronounced differences by race. Financial assistance from loans, grants, and scholarships do favor minority youth, but whites are much more likely than minorities to receive assistance from parents and friends.

Appendix 6A

The independent influence of family background and other factors on the probability of dropping out of school may be assessed by modeling this behavior in a multivariate fashion. Two such models were estimated empirically. The first contained a series of family background measures and several geographic variables. The second model, in addition, contained a series of intervening variables that could also be influenced by family background.[1] Both models were estimated on a sample of 18 to 21 year olds who were not enrolled in high school, with separate estimates derived for six groups--black females, Hispanic females, white females, black males, Hispanic males, and white males.

Family background measures used in the two models indicate the status of the family when the respondent was 14 years old. They consist of measures of family structure--separate variables indicating the absence of both the mother and father from the household, the education and an earnings proxy of both the mother and father (if they were in the household),[2] number of siblings, a culture index indicating the presence of newpapers, magazines, and a library card in the household, and the geographic location of the household--on a farm, in the South, or in a foreign country. Location of current residence and local unemployment rate at the time of interview were also included in the first model.

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[1] Since many of the intervening variables are measured after the decision to drop out of school, inferring causality from these variables is inappropriate. For example, not only might educational aspirations influence the decision to drop out of school, but the decision to drop out might influence educational aspirations. The effects of the intervening variables in the second model, therefore, should only be viewed as indicative of association.

[2] Father's and mother's earnings were proxied by using race- and sex-specific means for civilian workers 18 years old and over in 1975 within major occupation groups (U.S. Bureau of the Census, 1977: 234). These measures were less than ideal, so the estimated effects of family income are likely to be understated.

The intervening variables included in the second model measure the respondent's educational aspirations, best friend's educational aspirations, aspirations for professional or managerial occupation at age 35, a psychological measure of individual initiative (Rotter), a proxy measure for ability,[3] whether the respondent was married within two months of leaving school or was married later, and whether the respondent had a child within 9 months of leaving school or later. Detailed descriptions of all variables appear in the glossary at the end of this chapter. Means and standard deviations of the independent variables for each of the six groups appear in Table 6A.1.

Since the dependent variable in both models represents the likelihood of dropping out of school, the models were estimated with probit techniques.[4] The estimated coefficients and tests of significance for both models appear in Tables 6A.2 and 6A.3. Two

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[3] Ability is proxied with a test score measuring knowledge of the world of work. Although this test does not measure innate ability, it does compare favorably with more conventional ability measures (Griliches, 1976).

[4] When the dependent variable is dichotomous, ordinary least squares (OLS) estimates are inappropriate because the error terms are heteroskedastic and because only a nonlinear specification assures that the predicted probabilities fall between zero and one (Theil 1971).

Table 6A.1 Means of Independent Variables for Dropout Equations, by Race and Sex

(standard deviations in parentheses)

Independent variable	Female			Male		
	Black	Hispanic	White	Black	Hispanic	White
Mother's earnings ($1000)	2.263 (2.50)	1.429 (1.95)	2.089 (2.69)	2.469 (2.61)	1.657 (2.08)	1.925 (2.63)
Mother not in household	0.106 (0.31)	0.096 (0.30)	0.056 (0.23)	0.116 (0.32)	0.052 (0.22)	0.051 (0.22)
Mother not working	0.343 (0.48)	0.496 (0.50)	0.476 (0.50)	0.300 (0.46)	0.490 (0.50)	0.504 (0.50)
Mother's education unknown	0.060 (0.24)	0.041 (0.20)	0.030 (0.17)	0.070 (0.26)	0.072 (0.26)	0.034 (0.18)
Mother's education (years)	8.813 (4.69)	6.966 (4.69)	10.578 (4.08)	8.830 (4.84)	6.778 (4.71)	10.732 (4.07)
Father's earnings ($1000)	3.477 (4.09)	4.437 (4.26)	8.176 (6.19)	3.373 (4.04)	4.774 (4.24)	8.590 (6.20)
Father not in household	0.429 (0.50)	0.316 (0.47)	0.187 (0.39)	0.440 (0.50)	0.271 (0.44)	0.178 (0.38)
Father not working	0.034 (0.18)	0.060 (0.24)	0.043 (0.20)	0.041 (0.20)	0.052 (0.22)	0.037 (0.19)
Father's education unknown	0.074 (0.26)	0.063 (0.24)	0.037 (0.19)	0.083 (0.28)	0.052 (0.22)	0.035 (0.18)
Father's education (years)	4.795 (5.56)	4.935 (5.40)	9.037 (5.66)	4.656 (5.47)	5.405 (5.38)	9.336 (5.68)
Number of siblings	6.041 (3.09)	5.725 (3.24)	4.389 (2.14)	5.669 (2.89)	5.784 (3.01)	4.207 (2.16)
Cultural index	1.704 (1.06)	1.619 (1.04)	2.300 (0.88)	1.741 (1.03)	1.642 (1.08)	2.32 (0.86)
Resided on farm at age 14	0.023 (0.15)	0.031 (0.17)	0.070 (0.26)	0.029 (0.17)	0.067 (0.25)	0.075 (0.26)
Resided in South at age 14	0.581 (0.49)	0.229 (0.42)	0.280 (0.45)	0.560 (0.50)	0.242 (0.43)	0.266 (0.44)
Resided outside U.S. at age 14	0.010 (0.10)	0.104 (0.31)	0.016 (0.13)	0.013 (0.11)	0.095 (0.29)	0.019 (0.14)
Age (years)	19.479 (1.23)	19.566 (1.24)	19.614 (1.22)	19.381 (1.24)	19.410 (1.23)	19.587 (1.24)

Table 6A.1 continued

(standard deviations in parentheses)

Independent variable	Female			Male		
	Black	Hispanic	White	Black	Hispanic	White
Current residence in South	0.572 (0.50)	0.277 (0.45)	0.296 (0.46)	0.558 (0.50)	0.284 (0.45)	0.287 (0.45)
Current residence in central city	0.438 (0.50)	0.547 (0.50)	0.253 (0.44)	0.478 (0.50)	0.518 (0.50)	0.279 (0.45)
Current residence in rural area	0.247 (0.43)	0.178 (0.38)	0.350 (0.48)	0.282 (0.45)	0.180 (0.39)	0.348 (0.48)
Local unemployment rate	45.268 (16.79)	52.424 (16.71)	43.573 (16.32)	44.146 (16.13)	52.711 (17.08)	42.938 (16.10)
Educational aspirations	14.605 (2.21)	14.183 (2.40)	14.386 (2.22)	14.450 (2.31)	14.150 (2.47)	14.415 (2.42)
Educational aspirations of friend	14.278 (2.16)	13.95 (2.31)	14.181 (2.20)	14.067 (2.22)	14.008 (2.42)	14.113 (2.33)
Aspire to professional/ managerial occupation	0.465 (0.50)	0.388 (0.49)	0.438 (0.50)	0.486 (0.50)	0.456 (0.50)	0.483 (0.50)
Rotter score	8.811 (2.28)	8.802 (2.50)	8.222 (2.47)	8.550 (2.37)	8.675 (2.51)	8.057 (2.43)
KWW score	5.363 (2.01)	5.412 (2.06)	6.749 (1.81)	5.244 (2.05)	5.624 (2.14)	6.966 (1.86)
Married less than 2 months after leaving high school	0.062 (0.24)	0.123 (0.33)	0.094 (0.29)	0.005 (0.07)	0.031 (0.17)	0.017 (0.13)
Married otherwise	0.100 (0.30)	0.207 (0.41)	0.197 (0.40)	0.036 (0.19)	0.111 (0.31)	0.105 (0.31)
Child less than 9 months after leaving high school	0.299 (0.46)	0.133 (0.34)	0.094 (0.29)	0.075 (0.26)	0.044 (0.21)	0.017 (0.13)
Child otherwise	0.096 (0.29)	0.123 (0.33)	0.112 (0.32)	0.067 (0.25)	0.062 (0.24)	0.601 (0.24)
Number of respondents	699	415	1686	611	388	1447

Table 6A.2 Probit Estimates for Dropout Equations, by Race: Females

(t-values in parentheses)

Independent variable	Black		Hispanic		White	
	(1)	(2)	(1)	(2)	(1)	(2)
Mother's earnings ($1000)	-0.049 (-0.90)	-0.029 (-0.41)	-0.059 (-0.69)	0.054 (0.50)	-0.056+ (-1.94)	-0.025 (-0.72)
Mother not in household	-0.883* (-2.35)	-0.700 (-1.43)	0.516 (0.13)	0.462 (0.92)	-0.921** (-3.28)	-0.584+ (-1.74)
Mother not working	-0.310 (-1.30)	-0.286 (-0.94)	-0.287 (-0.89)	0.171 (0.42)	-0.414** (-2.90)	-0.222 (-1.32)
Mother's education unknown	-0.974** (-2.66)	-0.649 (-1.42)	0.425 (1.10)	-0.363 (-0.70)	-0.575+ (-1.88)	-0.352 (-0.95)
Mother's education (years)	-0.132** (-4.69)	-0.103** (-2.83)	-0.024 (-0.97)	-0.023 (-0.75)	-0.094** (-4.60)	-0.071** (-2.76)
Father's earnings ($1000)	-0.000 (-0.01)	-0.011 (-0.31)	-0.032 (-1.01)	-0.018 (-0.44)	-0.021+ (-1.88)	0.001 (0.09)
Father not in household	0.152 (0.48)	0.101 (0.25)	-0.094 (-0.31)	0.097 (0.25)	0.079 (0.36)	0.757** (2.72)
Father not working	0.091 (0.25)	-0.317 (-0.72)	-0.198 (-0.53)	0.228 (0.50)	-0.047 (-0.22)	0.262 (1.04)
Father's education unknown	-0.005 (-0.02)	-0.059 (-0.14)	0.428 (1.32)	0.201 (0.50)	0.054 (0.20)	0.407 (1.22)
Father's education (years)	0.006 (0.24)	0.025 (0.69)	-0.025 (-1.02)	-0.025 (-0.76)	-0.007 (-0.39)	0.033 (1.47)
Number of siblings	0.024 (1.20)	0.027 (1.04)	0.035 (1.39)	0.003 (0.09)	0.096** (5.15)	0.070** (3.13)
Cultural index	-0.331** (-5.12)	-0.109 (-1.28)	-0.229** (-2.98)	-0.085 (-0.88)	-0.307** (-6.26)	-0.087 (-1.46)
Resided on farm at age 14	-0.078 (-0.21)	0.045 (0.11)	-0.050 (-0.12)	0.097 (0.17)	-0.559** (-2.78)	-0.497* (-2.18)
Resided in South at age 14	0.142 (0.59)	-0.161 (-0.55)	-0.019 (-0.06)	0.272 (0.65)	0.335+ (1.91)	0.324 (1.58)
Resided outside U.S. at age 14	-3.874 (-0.42)	-2.747 (-0.19)	0.412+ (1.72)	0.658* (2.13)	-0.607+ (-1.70)	-0.642 (-1.49)
Age (years)	-0.056 (-1.12)	-0.159* (-2.30)	-0.074 (-1.30)	-0.064 (-0.85)	-0.048 (-1.40)	-0.116** (-2.62)

Table 6A.2 (continued)

(t-values in parentheses)

Independent variable	Black		Hispanic		White	
	(1)	(2)	(1)	(2)	(1)	(2)
Current residence in South	-0.556* (-2.29)	-0.081 (-0.28)	-0.335 (-1.07)	-0.666+ (-1.73)	-0.117 (-0.67)	-0.017 (-0.08)
Current residence in central city	0.158 (1.05)	0.523** (2.67)	-0.162 (-0.94)	0.046 (0.21)	0.097 (0.91)	0.299* (2.30)
Current residence in rural area	0.035 (0.20)	-0.345 (-1.48)	-0.234 (-1.04)	-0.109 (-0.39)	-0.001 (-0.01)	-0.139 (-1.15)
Local unemployment rate	0.000 (0.04)	0.002 (0.44)	-0.001 (-0.16)	-0.003 (-0.57)	0.005+ (1.82)	0.007* (2.50)
Educational aspirations		-0.328** (-6.81)		-0.250** (-5.11)		-0.251** (-7.45)
Educational aspirations of friend		-0.094* (-2.09)		-0.114* (-2.45)		-0.073* (-2.44)
Aspire to professional/ managerial occupation		-0.057 (-0.31)		0.009 (0.04)		0.089 (0.75)
Rotter score		0.058 (1.62)		0.044 (1.12)		0.039+ (1.89)
KWW score		-0.095* (-2.21)		-0.095+ (-1.79)		-0.172** (-6.19)
Married less than 2 months after leaving high school		0.794** (3.06)		0.516+ (1.77)		0.348* (2.06)
Married otherwise		0.369 (1.45)		0.299 (1.23)		0.329* (2.41)
Child less than 9 months after leaving high school		1.096** (6.21)		0.983** (3.64)		0.886** (5.48)
Child otherwise		1.343** (5.15)		0.655* (2.30)		0.872** (5.86)
Constant	2.098+ (1.89)	8.177** (5.09)	1.899 (1.56)	5.787** (3.28)	1.369+ (1.86)	5.754** (5.40)
Chi-square	117.838	319.945	73.342	220.466	302.624	654.079
Number of respondents	699	699	415	415	1686	1686

Table 6A.3 Probit Estimates for Dropout Equations, by Race: Males

(t-values in parentheses)

Independent variable	Black		Hispanic		White	
	(1)	(2)	(1)	(2)	(1)	(2)
Mother's earnings ($1000)	-0.063	-0.050	0.120	0.194+	-0.066*	-0.051
	(-1.38)	(-1.05)	(1.54)	(1.94)	(-2.09)	(-1.34)
Mother not in household	-0.896*	-0.631	0.499	1.173*	-1.075**	-0.686+
	(-2.38)	(-1.57)	(1.11)	(2.18)	(-3.53)	(-1.92)
Mother not working	-0.239	-0.145	0.443	0.682+	-0.280+	-0.278
	(-1.10)	(-0.63)	(1.41)	(1.74)	(-1.87)	(-1.60)
Mother's education unknown	-0.024	0.043	0.679*	0.476	-0.611+	-0.581
	(-0.07)	(0.11)	(1.98)	(1.20)	(-1.93)	(-1.57)
Mother's education (years)	-0.075*	-0.050	-0.024	0.002	-0.108	-0.075**
	(-2.51)	(-1.54)	(-0.98)	(0.06)	(-4.87)	(-2.92)
Father's earnings ($1000)	-0.011	-0.003	-0.012	-0.043	-0.002	-0.001
	(-0.43)	(-0.10)	(-0.40)	(-1.13)	(-0.17)	(-0.04)
Father not in household	-0.490	-0.468	-0.121	-0.138	-0.687**	-0.254
	(-1.53)	(-1.36)	(-0.39)	(-0.37)	(-2.96)	(-0.89)
Father not working	-0.536	-0.471	0.043	-0.357	0.130	0.437+
	(-1.41)	(-1.12)	(0.11)	(-0.76)	(0.56)	(1.62)
Father's education unknown	-0.568+	-0.692+	-0.572	-0.390	-0.558+	-0.080
	(-1.70)	(-1.94)	(-1.47)	(-0.83)	(-1.92)	(-0.23)
Father's education (years)	-0.064*	-0.068*	-0.055*	-0.023	-0.100**	-0.058*
	(-2.27)	(-2.21)	(-2.22)	(-0.76)	(-5.12)	(-2.40)
Number of siblings	-0.018	-0.019	0.023	0.016	0.073**	0.067**
	(-0.80)	(-0.81)	(0.87)	(0.53)	(3.70)	(2.93)
Cultural index	-0.150*	-0.053	-0.135+	-0.029	-0.223**	-0.044
	(-2.39)	(-0.79)	(-1.79)	(-0.32)	(-4.29)	(-0.73)
Resided on farm at age 14	0.502	0.176	-0.267	-0.557	-0.012	-0.044
	(1.50)	(0.50)	(-0.83)	(-1.39)	(-0.07)	(-0.23)
Resided in South at age 14	0.165	0.245	0.964**	0.729+	0.089	0.363
	(0.68)	(0.96)	(2.60)	(1.65)	(0.47)	(1.52)
Resided outside U.S. at age 14	-0.254	0.190	0.795**	1.134**	-0.626+	-0.600
	(-0.43)	(0.28)	(2.87)	(3.45)	(-1.79)	(-1.18)
Age (years)	0.028	0.062	-0.034	-0.010	-0.075**	-0.072
	(0.59)	(1.14)	(-0.55)	(-0.12)	(-2.08)	(-1.61)

Table 6A.3 (continued)

(t-values in parentheses)

Independent variable	Black (1)	Black (2)	Hispanic (1)	Hispanic (2)	White (1)	White (2)
Current residence in South	-0.416+ (-1.68)	-0.521* (-1.97)	-0.834* (-2.32)	-0.556 (-1.29)	0.085 (0.46)	0.011 (0.04)
Current residence in central city	0.295+ (1.87)	0.354* (2.05)	-0.102 (-0.59)	-0.312 (-1.54)	-0.094 (-0.80)	-0.057 (-0.41)
Current residence in rural area	0.275 (1.55)	0.273 (1.43)	-0.129 (-0.56)	-0.260 (-0.95)	0.013 (0.13)	-0.165 (-1.37)
Local unemployment rate	-0.009* (-2.19)	-0.008+ (-1.87)	-0.011* (-2.35)	-0.015** (-2.67)	0.000 (0.13)	0.002 (0.74)
Educational aspirations		-0.132** (-3.71)		-0.251** (-4.82)		-0.294** (-8.28)
Educational aspirations of friend		-0.063+ (-1.70)		-0.051 (-1.21)		-0.114** (-3.71)
Aspire to professional/managerial occupation		-0.388** (-2.68)		-0.385+ (-1.89)		-0.206+ (-1.68)
Rotter score		0.051+ (1.89)		0.015 (0.39)		0.066** (2.99)
KWW score		-0.006 (-0.16)		-0.120** (-2.63)		-0.050* (-1.76)
Married less than 2 months after leaving high school		0.110 (0.15)		-0.103 (-0.18)		0.162 (0.42)
Married otherwise		-0.728+ (-1.79)		0.753* (2.36)		0.515** (2.87)
Child less than 9 months after leaving high school		0.288 (1.23)		0.109 (0.23)		0.263 (0.72)
Child otherwise		0.441+ (1.74)		0.463 (1.22)		0.343 (1.57)
Constant	0.904 (0.84)	2.214+ (1.82)	0.803 (0.62)	4.728** (2.69)	3.089** (3.99)	6.829** (6.49)
Chi-square	77.634	150.855	69.832	173.344	334.131	592.981
Number of respondents	611	611	388	388	1447	1447

simulations were also performed in order to ascertain the marginal contribution of the independent variables on the probability of dropping out.[5] The first depicts an individual from advantaged background--a household with two children, two parents with average education levels, and adequate reading material; the second depicts an individual from a disadvantaged background--a household with four children, no father, and little reading material. The values of all the independent variables used in the two simulations for each of the two models appear in Table 6A.4. Since the same values of independent variables were used on each of the six cohorts, it is possible to compare the probability of dropping out assuming individuals had the same background and other characteristics. We limit the discussion below to those independent variables that exhibit significant effects on the probability of dropping out.

Actual and predicted dropout probabilities together with partial derivatives of selected independent variables for the first model appear in Table 6A.5. The actual probabilities show that minority men and women are more likely to drop out of high school than whites. But with similar background characteristics, the predicted probabilities of dropping out are much more similar between whites and minorities. For individuals from an

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[5] The sign of each probit coefficient indicates a positive or negative effect of the corresponding independent variable on the probability of dropping out and the t-value indicates whether the effect is significant. But the magnitude of the effect depends on the values of the other independent variables, since a probit model assumes a nonlinear functional form. The simulations provide a set of specific values for each of the independent variables so that the marginal effect (partial derivative) of each independent variable can be evaluated.

Table 6A.4 Values of Independent Variables for Dropout Simulations

Independent variable	Simulation			
	(1) Advantaged	(2) Advantaged	(1) Disadvantaged	(2) Disadvantaged
Mother's earnings ($1000)	4.5	4.5	5	5
Mother not in household	0	0	0	0
Mother not working	0	0	0	0
Mother's education unknown	0	0	0	0
Mother's education (years)	10.9	10.9	10	10
Father's earnings ($1000)	10.6	10.6	0	0
Father not in household	0	0	1	1
Father not working	0	0	0	0
Father's education unknown	0	0	0	0
Father's education (years)	11	11	0	0
Number of siblings	2	2	4	4
Cultural index	2	2	1	1
Resided on farm at age 14	0	0	0	0
Resided in South at age 14	0	0	0	0
Resided outside U.S. at age 14	0	0	0	0
Age (years)	18	18	18	18
Current residence in South	0	0	0	0
Current residence in rural area	0	0	0	0
Local unemployment rate (%)	5	5	5	5
Educational aspirations	0	16	0	12
Educational aspirations of friend	0	16	0	12
Aspire to professional/ managerial occupation	0	0	0	0

Table 6A.4 continued

Independent variable	Simulation (1) Advantaged	(2) Advantaged	(1) Disadvantaged	(2) Disadvantag
Rotter score	0	8	0	8
KWW score	0	7	0	7
Married less than 2 months after leaving high school	0	0	0	0
Married otherwise	0	0	0	0
Child less than 9 months after leaving high school	0	0	0	0
Child otherwise	0	0	0	0

Table 6A.5 Actual and Predicted Probabilities of Dropping Out of High School and Partial Derivatives of Selected Background and Control Variables, by Race and Sex

Characteristic	Female			Male		
	Black	Hispanic	White	Black	Hispanic	White
Actual probability	20.0	30.8	16.0	25.9	29.3	18.5
Advantaged background						
Predicted probability	13.4	16.1	10.4	10.4	14.8	12.7
Partial derivatives						
Mother's earnings	-1.1	-1.4	-1.0+	-1.1	2.8	-1.4*
Mother's education	-2.8**	-0.6	-1.7**	-1.4*	-0.6	-2.3
Father's earnings	-0.0	-0.8	-0.4+	-0.2	-0.3	-0.0
Father's education	0.1	-0.6	-0.1	-1.2*	-1.3*	-2.1**
Number of siblings	0.5	0.9	1.7**	-0.0	0.5	1.5**
Cultural index	-7.1**	-5.6**	-5.6**	-2.7*	-3.1+	-4.6**
Resided outside U.S.[a]	-13.4	12.1+	-7.3+	-3.9	25.4**	-8.8+
South[a]	-8.6*	-6.8	-1.9	-5.7+	-11.8*	1.9
Unemployment rate	0.0	-0.0	0.8*	-1.6*	-2.6*	0.1
Disadvantaged background						
Predicted probability	29.1	42.9	37.2	22.8	43.5	39.1
Partial derivatives						
Mother's earnings	-1.7	-2.3	-2.1+	-1.9	4.7	-2.6*
Mother's education	-4.5**	-0.9	-3.6**	-2.3*	-0.9	-4.1
Number of siblings	0.8	1.4	3.6**	-0.1	0.9	2.8**
Cultural index	-11.3**	-9.0**	-11.6**	-4.5*	-5.3+	-8.5**
Resided outside U.S.[a]	-29.1	16.3+	-19.7+	-6.9	30.1**	-20.8+
South[a]	-15.7*	-12.5	-4.4	-10.5+	-27.6*	3.3
Unemployment rate	0.0	-0.3	1.8*	-2.6*	-4.4*	0.1

+ Probit coefficient significant at .10 level. From Tables 8.A3 and 8.A4.

* Probit coefficient significant at .05 level. From Tables 8.A3 and 8.A4.

** Probit coefficient significant at .01 level. From Tables 8.A3 and 8.A4.

[a] For qualitative independent variables, the partial derivatives actually represent the difference between the predicted probability with the independent variable set to zero and the probability with the independent variable set to one, with all other independent variables held constant.

simulations were also performed in order to ascertain the marginal contribution of the independent variables on the probability of dropping out.[5] The first depicts an individual from advantaged background--a household with two children, two parents with average education levels, and adequate reading material; the second depicts an individual from a disadvantaged background--a household with four children, no father, and little reading material. The values of all the independent variables used in the two simulations for each of the two models appear in Table 6A.4. Since the same values of independent variables were used on each of the six cohorts, it is possible to compare the probability of dropping out assuming individuals had the same background and other characteristics. We limit the discussion below to those independent variables that exhibit significant effects on the probability of dropping out.

Actual and predicted dropout probabilities together with partial derivatives of selected independent variables for the first model appear in Table 6A.5. The actual probabilities show that minority men and women are more likely to drop out of high school than whites. But with similar background characteristics, the predicted probabilities of dropping out are much more similar between whites and minorities. For individuals from an

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[13] The sign of each probit coefficient indicates a positive or negative effect of the corresponding independent variable on the probability of dropping out and the t-value indicates whether the effect is significant. But the magnitude of the effect depends on the values of the other independent variables, since a probit model assumes a nonlinear functional form. The simulations provide a set of specific values for each of the independent variables so that the marginal effect (partial derivative) of each independent variable can be evaluated.

advantaged background the predicted probabilities range from 10 to 16 percent; for individuals from a disadvantaged background they range from 23 to 44 percent. Parents' earnings and education do not greatly affect the probability of dropping out for advantaged youths. But for disadvantaged youths, whose fathers are frequently absent, mother's earnings and education show a stronger effect on the probability of dropping out, especially among females. For example, a $1000 increase in mother's earnings reduces the probability of dropping out from 2 to 5 percentage points; a one year increase in mother's education reduces the probability of dropping out from one to 5 percentage points. An increase in the number of siblings significantly increases the probability of dropping out, but only for white males and females. An increase in the cultural index, signifying a greater amount of reading material in the household, significantly reduces the propensity of dropping out for all cohorts, but the cultural effect is greatest for individuals from disadvantaged backgrounds.

Where an individual resided at age 14 significantly effects the probability of dropping out for some cohorts. For white females, residing on a farm decreases the likelihood of dropping out, while residing in the South increases the likelihood; residing outside of the United States reduces the probability of dropping out for white males and females. For blacks, the location of residence at age 14 shows no significant effect on the propensity to drop out. For Hispanic males, residing in the South at age 14 increases the probability of dropping out;

residing outside the United States at age 14 greatly increases the probability of dropping out for Hispanic males and females.

Indicators of current residence also show significant effects, but mostly for males. Black males and females and Hispanic males residing in the South have lower probabilities of dropping out, after controlling for differences in family background. Black males currently residing in the central city show higher propensities to drop out compared to individuals residing in rural or suburban areas. Finally, an increase in the local unemployment rate decreases the likelihood of dropping out for minority males, but slightly increases the likelihood for white females. Minority males from disadvantaged backgrounds are even more likely than those from advantaged backgrounds to drop out when unemployment rates fall.

The second model allows us to assess the effects of a series of intervening independent variables on the probability of dropping out, after controlling for the effects of family background and current conditions. Actual and predicted probabilities together with partial derivatives of selected independent variables for the two simulations appear in Table 6A.6. For individuals from advantaged backgrounds with high educational aspirations and average ability, the predicted probabilities of dropping out approach zero. For youths from disadvantaged backgrounds with lower aspirations, predicted probabilities vary greatly--ranging from 18 percent for black females to 63 percent for Hispanic males.

Many of the intervening variables in the second model

Table 6A.6 Actual and Predicted Probabilities of Dropping Out of High School and Partial Derivatives of Selected Intervening Variables, by Race and Sex

Characteristic	Female			Male		
	Black	Hispanic	White	Black	Hispanic	White
Actual probability	20.0	30.8	16.0	25.9	29.3	18.5
Advantaged background						
Predicted probability	0.3	1.1	0.5	7.0	5.6	1.0
Partial derivatives						
Educational aspirations	-0.3**	-0.7**	-0.4**	-1.8**	-2.8**	-0.8**
Friend's aspirations[a]	-0.1*	-0.3*	-0.1*	-0.8+	-0.6	-0.3**
Aspire to prof. occ.[a]	-0.1	0.0	0.1	-3.9**	-3.2+	-0.5+
Rotter	0.1	-0.3	0.1+	0.7+	0.2	0.2**
KWW	-0.1*	-0.3+	-0.3**	-0.1	-1.3**	-0.1*
Married early[a]	1.9**	2.7+	0.8*	1.5	-1.1	0.5
Married later[a]	0.4	1.2	0.7*	-5.6+	14.5*	2.4**
Child early[a]	4.0**	8.4**	4.0**	4.7	1.3	0.9
Child later[a]	6.8**	4.0*	3.9**	7.9+	7.4	1.3
Disadvantaged background						
Predicted probability	17.5	44.2	26.5	35.8	63.2	46.0
Partial derivatives						
Educational aspirations	-8.5**	-9.9**	-8.2**	-4.9**	-9.5**	-11.7**
Friend's aspirations[a]	-2.4*	-4.5*	-2.4*	-2.3+	-1.9	-4.5**
Aspire to prof. occ.[a]	-1.4	0.4	3.0	-13.2**	-15.1+	-8.1+
Rotter	1.5	1.7	1.3+	1.9+	0.6	2.6**
KWW	-2.5*	-3.8+	-5.6**	-0.2	-4.5**	-2.0*
Married early[a]	26.9**	20.2+	12.5*	4.2	-3.9	6.4
Married later[a]	11.0	11.9	11.8*	-22.0+	23.0*	20.1**
Child early[a]	38.9**	35.7**	33.7**	11.2	4.0	10.4
Child later[a]	48.3**	25.3*	33.2**	17.3+	15.7	13.6

+ Probit coefficients significant at .10 level. From Tables 8.A3 and 8.A4.

* Probit coefficients significant at .05 level. From Tables 8.A3 and 8.A4.

** Probit coefficients significant at .01 level. From Tables 8.A3 and 8.A4.

[a] For qualitative independent variables, the partial derivatives actually represent the difference between the predicted probability with the independent variable set to zero and the probability with the independent variable set to one, with all other independent variables held constant.

significantly affect the probability of dropping out, although the effects are stronger for individuals from disadvantaged backgrounds. An increase in both an individual's educational aspirations and a close friend's educational aspirations reduce the likelihood of dropping out. Males, especially minorities, who aspire to professional or managerial employment at age 35 are less likely to drop out than males with other occupational aspirations. Increasing ability, as indexed by knowledge of the world of work, decreases the probability of dropping out for all groups except black males, with marginal effects ranging from one to 5 percentage points.

The effects of marriage and having a child vary widely among the six cohorts. Married women in this age group (18 to 21), whether they get married early--within two months of leaving school--or later are much more likely to be high school dropouts than women who have never been married. Hispanic and white males who get married later are much more likely to be high school dropouts than either those who get married early or those who have never married. Interestingly, black males who get married later are less likely to be high school dropouts. Women who have a child, either early--within nine months of leaving school--or later, are much more likely to be high school dropouts that women who have never had a child. Childbirth does not affect the likelihood of dropping out of high school for Hispanic and white males, but it does for black males.

Table 6B.1 Means of Independent Variables for College Equations, by Race and Sex

(standard deviations in parentheses)

Independent variable	Female			Male		
	Black	Hispanic	White	Black	Hispanic	White
Mother's earnings ($1000)	2.468 (2.60)	1.654 (2.07)	2.169 (2.75)	2.735 (2.83)	1.933 (2.20)	2.119 (2.76)
Mother not in household	0.086 (0.28)	0.065 (0.25)	0.039 (0.19)	0.102 (0.30)	0.044 (0.21)	0.037 (0.19)
Mother not working	0.340 (0.47)	0.481 (0.50)	0.488 (0.50)	0.290 (0.45)	0.456 (0.50)	0.499 (0.50)
Mother's education unknown	0.056 (0.23)	0.030 (0.17)	0.022 (0.15)	0.030 (0.17)	0.033 (0.18)	0.022 (0.15)
Mother's education (years)	9.522 (4.57)	8.121 (4.60)	11.182 (3.70)	9.894 (4.50)	8.056 (4.85)	11.576 (3.57)
Father's earnings ($1000)	3.936 (4.23)	5.136 (4.45)	8.870 (6.10)	3.646 (4.22)	5.571 (4.39)	9.551 (6.12)
Father not in household	0.394 (0.49)	0.294 (0.46)	0.152 (0.36)	0.406 (0.50)	0.233 (0.42)	0.134 (0.34)
Father not working	0.021 (0.14)	0.035 (0.18)	0.033 (0.18)	0.046 (0.21)	0.028 (0.16)	0.025 (0.16)
Father's education unknown	0.065 (0.25)	0.043 (0.20)	0.032 (0.18)	0.059 (0.24)	0.056 (0.23)	0.024 (0.15)
Father's education (years)	5.406 (5.80)	6.147 (5.77)	9.786 (5.44)	5.644 (5.84)	6.844 (5.83)	10.514 (5.34)
Number of siblings	5.814 (2.95)	5.108 (2.77)	4.187 (1.93)	5.350 (2.85)	5.139 (2.71)	3.913 (1.99)
Cultural index	1.914 (1.01)	1.909 (0.99)	2.443 (0.77)	1.960 (1.00)	1.911 (1.02)	3.49 (0.72)
Resided on farm at age 14	0.019 (0.14)	0.017 (0.13)	0.080 (0.27)	0.013 (0.11)	0.050 (0.22)	0.071 (0.26)
Resided in South at age 14	0.592 (0.49)	0.238 (0.43)	0.261 (0.44)	0.541 (0.50)	0.256 (0.44)	0.252 (0.43)
Resided outside U.S. at age 14	0.014 (0.12)	0.065 (0.25)	0.015 (0.12)	0.013 (0.11)	0.050 (0.22)	0.016 (0.13)
Age (years)	19.790 (1.16)	19.883 (1.15)	19.794 (1.17)	19.786 (1.18)	19.839 (1.10)	19.884 (1.18)

Table 6B.1 continued

(standard deviations in parentheses)

Independent variable	Female			Male		
	Black	Hispanic	White	Black	Hispanic	White
Current residence in South	0.580 (0.49)	0.303 (0.46)	0.284 (0.45)	0.535 (0.50)	0.333 (0.47)	0.272 (0.45)
Current residence in central city	0.452 (0.50)	0.580 (0.49)	0.251 (0.43)	0.492 (0.50)	0.494 (0.50)	0.286 (0.45)
Current residence in rural area	0.186 (0.39)	0.152 (0.36)	0.331 (0.47)	0.234 (0.42)	0.183 (0.39)	0.330 (0.47)
Local unemployment rate	44.084 (14.35)	51.697 (16.28)	42.988 (15.68)	44.333 (15.11)	52.111 (16.84)	42.308 (15.96)
Vocational high school curriculum	0.186 (0.39)	0.203 (0.40)	0.199 (0.40)	0.129 (0.34)	0.161 (0.37)	0.162 (0.37)
College prep high school curriculum	0.324 (0.47)	0.346 (0.48)	0.361 (0.48)	0.363 (0.48)	0.350 (0.48)	0.415 (0.49)
Recipient of GED	0.044 (0.21)	0.039 (0.19)	0.043 (0.20)	0.050 (0.22)	0.039 (0.19)	0.038 (0.19)
Educational aspirations	15.357 (1.90)	15.126 (1.88)	14.875 (2.06)	15.360 (2.05)	15.267 (2.03)	15.190 (2.15)
Educational aspirations of friend	14.890 (2.01)	14.736 (1.96)	14.575 (2.15)	14.772 (2.12)	14.833 (2.18)	14.707 (2.22)
Aspire to professional/ managerial occupation	0.550 (0.50)	0.481 (0.50)	0.481 (0.50)	0.647 (0.48)	0.606 (0.49)	0.572 (0.50)
Rotter score	8.606 (2.34)	8.195 (2.43)	7.946 (2.43)	8.426 (2.27)	8.250 (2.58)	7.695 (2.34)
KWW score	5.804 (1.90)	6.169 (1.86)	7.125 (1.59)	5.855 (1.99)	6.478 (1.90)	7.458 (1.53)
Married less than 2 months after leaving high school	0.051 (0.22)	0.078 (0.27)	0.069 (0.25)	0.007 (0.08)	0.022 (0.15)	0.014 (0.12)
Married otherwise	0.112 (0.32)	0.182 (0.39)	0.182 (0.39)	0.059 (0.24)	0.083 (0.28)	0.085 (0.28)
Child less than 9 months after leaving high school	0.228 (0.42)	0.065 (0.25)	0.063 (0.24)	0.083 (0.28)	0.028 (0.16)	0.013 (0.11)
Child otherwise	0.096 (0.29)	0.074 (0.26)	0.082 (0.27)	0.066 (0.25)	0.028 (0.16)	0.041 (0.20)
Number of respondents	429	231	1245	303	180	983

Table 6B.2 Probit Estimates for College Equations, by Race: Females

(t-values in parentheses)

Independent variable	Black		Hispanic		White	
	(1)	(2)	(1)	(2)	(1)	(2)
Mother's earnings ($1000)	0.027 (0.54)	-0.077 (-1.08)	0.022 (0.24)	-0.100 (-0.75)	0.016 (0.62)	-0.047 (-1.40)
Mother not in household	1.151** (2.61)	1.301* (2.25)	0.551 (0.97)	0.375 (0.47)	0.894* (2.54)	0.602 (1.39)
Mother not working	-0.035 (-0.14)	-0.388 (-1.13)	0.446 (1.19)	0.139 (0.24)	0.295* (2.06)	-0.001 (-0.00)
Mother's education unknown	1.237** (2.59)	1.428* (2.30)	-1.376+ (-1.94)	-2.269+ (-1.93)	0.853* (2.18)	0.818+ (1.73)
Mother's education (years)	0.114** (3.46)	0.151** (3.46)	-0.006 (-0.19)	0.030 (0.61)	0.114** (5.08)	0.102** (3.62)
Father's earnings ($1000)	-0.031 (-1.16)	-1.240 (-0.35)	0.063+ (1.71)	0.071 (1.47)	0.027** (2.86)	0.008 (0.71)
Father not in household	-0.136 (-0.43)	0.028 (0.07)	0.164 (0.41)	0.282 (0.48)	1.317** (5.55)	0.527+ (1.75)
Father not working	-0.105 (-0.21)	0.338 (0.36)	0.488 (0.81)	-0.173 (-0.22)	0.298 (1.25)	-0.134 (-0.46)
Father's education unknown	-0.571 (-1.46)	-0.193 (-0.37)	-1.666** (-2.59)	-2.081+ (-1.72)	8.196** (2.69)	0.512 (1.33)
Father's education (years)	0.023 (0.91)	0.015 (0.45)	-0.026 (-0.90)	-0.041 (-0.95)	0.099** (5.62)	0.049* (2.26)
Number of siblings	0.017 (0.69)	0.052 (1.59)	-0.045 (-1.23)	0.017 (0.30)	-0.051* (-2.43)	-0.054* (-2.07)
Cultural index	0.129+ (1.80)	-0.008 (-0.09)	0.185+ (1.80)	0.020 (0.13)	0.240** (4.21)	0.056 (0.80)
Resided on farm at age 14	-0.108 (-0.21)	0.223 (0.31)	0.782 (1.13)	0.309 (0.36)	0.252+ (1.71)	0.399* (2.18)
Resided in South at age 14	-0.458+ (-1.67)	-0.340 (-0.87)	-0.173 (-0.51)	-0.230 (-0.48)	0.069 (0.38)	0.078 (0.35)
Resided outside U.S. at age 14	0.769 (1.38)	-0.398 (-0.57)	-0.530 (-1.38)	-1.506* (-2.50)	1.685** (4.24)	1.669** (3.33)
Age (years)	-0.029 (-0.51)	0.130 (1.55)	-0.011 (-0.13)	0.123 (1.06)	0.022 (0.65)	0.029 (0.66)

Table 6B.2 continued

(t-values in parentheses)

Independent variable	Black (1)	Black (2)	Hispanic (1)	Hispanic (2)	White (1)	White (2)
Current residence in South	0.732** (2.59)	0.671+ (1.67)	0.152 (0.48)	0.181 (0.42)	0.194 (1.09)	0.095 (0.43)
Current residence in central city	0.077 (0.52)	0.036 (0.18)	0.541* (2.48)	0.925** (2.91)	0.005 (0.05)	-0.686 (-0.57)
Current residence in rural area	-0.397* (-2.04)	-0.286 (-1.03)	0.432 (1.43)	0.887* (1.97)	-0.247** (-2.66)	-0.077 (-0.65)
Local unemployment rate	0.011* (2.22)	0.016* (2.38)	-0.001 (-0.11)	0.009 (0.99)	-0.002 (-0.66)	0.001 (0.27)
Vocational high school curriculum		-0.147 (-0.65)		0.007 (0.02)		-0.018 (-0.14)
College prep high school curriculum		0.699** (3.42)		0.626* (1.96)		0.391** (3.40)
Recipient of GED		0.126 (0.28)		-1.741* (-1.96)		-0.586* (-2.04)
Educational aspirations		0.481** (7.21)		0.470** (4.70)		0.334** (10.75)
Educational aspirations of friend		-0.011 (-0.22)		0.127+ (1.67)		0.110** (4.40)
Aspire to professional/ managerial occupation		0.573** (3.22)		0.827** (3.05)		0.258* (2.49)
Rotter score		0.028 (0.73)		0.072 (1.25)		-0.040* (-1.97)
KWW score		0.066 (1.35)		0.151+ (1.75)		-0.003 (-0.10)
Married less than 2 months after leaving high school		-1.015* (-2.37)		-1.650** (-2.73)		-1.202** (-3.78)
Married otherwise		-0.700* (-2.37)		-0.875* (-2.23)		-0.525** (-3.67)
Child less than 9 months after leaving high school		-0.884** (-3.79)		-2.282 (-0.43)		-0.468 (-1.63)
Child otherwise		-0.815** (-2.69)		0.714 (1.11)		-0.462* (-2.07)
Constant	-1.508 (-1.21)	-12.964** (-5.82)	-0.551 (-0.31)	-14.703** (-4.58)	-3.761** (-5.01)	-8.634** (-8.27)
Chi-Square	62.953	288.313	36.315	169.665	[illegible]	[illegible]
Number of respondents	429	429	231	231	1245	1245

Table 6B.3 Probit Estimates for College Equations, by Race: Males

(t-values in parentheses)

Independent variable	Black		Hispanic		White	
	(1)	(2)	(1)	(2)	(1)	(2)
Mother's earnings ($1000)	-0.017	-0.097	0.033	0.028	0.039	0.028
	(-0.32)	(-1.47)	(0.29)	(0.17)	(1.32)	(0.74)
Mother not in household	1.866**	1.837**	0.058	0.107	1.007*	0.065
	(3.22)	(2.68)	(0.08)	(0.11)	(2.50)	(0.12)
Mother not working	0.116	-0.272	0.147	0.400	0.254	0.151
	(0.39)	(-0.75)	(0.30)	(0.56)	(1.60)	(0.73)
Mother's education unknown	1.438*	2.271*	-3.722	-4.547	0.317	-0.806
	(1.98)	(2.50)	(-0.18)	(-0.24)	(0.70)	(-1.33)
Mother's education (years)	0.172**	0.180**	0.065*	-0.003	0.084**	0.010
	(3.46)	(3.09)	(1.99)	(-0.07)	(3.17)	(0.28)
Father's earnings ($1000)	0.075*	0.071+	-0.036	-0.064	0.044**	0.031*
	(2.30)	(1.71)	(-0.82)	(-0.98)	(4.13)	(2.35)
Father not in household	0.602	0.329	-0.662	-1.314*	1.318**	0.221
	(1.24)	(0.57)	(-1.40)	(-2.00)	(4.84)	(0.64)
Father not working	0.616	0.358	-8.473	-6.982	0.301	-0.244
	(1.39)	(0.71)	(-0.23)	(-0.21)	(1.01)	(-0.62)
Father's education unknown	0.088	0.091	4.611	4.937	0.786*	0.213
	(0.16)	(0.14)	(0.22)	(0.26)	(2.08)	(0.41)
Father's education (years)	0.001	-0.045	-0.016	-0.010	0.079**	0.021
	(0.04)	(-0.93)	(-0.43)	(-0.21)	(3.97)	(0.85)
Number of siblings	-0.062+	-0.025	-0.027	-0.009	-0.065**	-0.037
	(-1.93)	(-0.66)	(-0.55)	(-0.13)	(-2.82)	(-1.24)
Cultural index	0.103	-0.036	0.294*	0.132	0.346**	0.037
	(1.15)	(-0.32)	(2.33)	(0.69)	(5.13)	(0.40)
Resided on farm at age 14	0.238	0.978	0.174	0.195	0.188	0.288
	(0.36)	(1.15)	(0.33)	(0.22)	(1.10)	(1.24)
Resided in South at age 14	-0.590+	-0.626	-0.361	-0.085	-0.038	0.184
	(-1.76)	(-1.45)	(-0.84)	(-0.15)	(-0.17)	(0.69)
Resided outside U.S. at age 14	4.074	3.361	-0.342	-1.562*	0.913*	-0.250
	(0.27)	(0.22)	(-0.61)	(-2.06)	(2.48)	(-0.58)
Age (years)	-0.070	-0.052	0.120	0.169	0.086*	0.140**
	(-1.00)	(-0.60)	(1.13)	(1.14)	(2.34)	(2.84)
Current residence in South	0.413	0.302	0.482	0.176	0.363+	-0.091
	(1.20)	(0.68)	(1.19)	(0.33)	(1.70)	(-0.35)

Table 6B.3 continued

(t-values in parentheses)

Independent variable	Black		Hispanic		White	
	(1)	(2)	(1)	(2)	(1)	(2)
Current residence in central city	-0.268 (-1.38)	-0.270 (-1.14)	0.001 (0.00)	-0.025 (-0.07)	0.079 (0.73)	-0.121 (-0.87)
Current residence in rural area	0.248 (1.06)	0.521+ (1.71)	0.003 (0.01)	-0.498 (-1.02)	-0.037 (-0.34)	0.026 (0.19)
Local unemployment rate	-0.001 (-0.15)	-0.001 (-0.18)	-0.008 (-1.27)	-0.008 (-0.80)	0.002 (0.63)	0.007+ (1.95)
Vocational high school curriculum		-0.555* (-1.75)		-0.748 (-1.58)		-0.224 (-1.38)
College prep high school curriculum		0.142 (0.65)		0.324 (0.96)		0.566** (4.40)
Recipient of GED		-1.212* (-2.06)		0.021 (0.03)		-0.684* (-2.13)
Educational aspirations		0.297** (4.31)		0.448** (4.30)		0.382** (10.34)
Educational aspirations of friend		0.041 (0.71)		0.223** (2.73)		0.083** (2.79)
Aspire to professional/ managerial occupation		0.849** (3.51)		0.251 (0.74)		0.506** (4.33)
Rotter score		0.034 (0.77)		-0.055 (-0.94)		-0.022 (-0.90)
KWW score		0.128* (2.26)		0.107 (1.21)		-0.003 (-0.09)
Married less than 2 months after leaving high school		-2.613 (-1.13)		-0.309 (-0.20)		-0.460 (-0.62)
Married otherwise		-1.229+ (-1.92)		-1.225 (-1.59)		-0.740** (-2.68)
Child less than 9 months after leaving high school		-0.456 (-1.22)		-0.585 (-0.37)		-5.306 (-0.44)
Child otherwise		-0.055 (-0.13)		0.321 (0.24)		-0.366 (-0.92)
Constant	-0.962 (-0.61)	-7.287** (-3.50)	-2.647 (-1.19)	-13.030** (-3.58)	-5.162** (-6.23)	-11.018** (-9.00)
Chi-square	60.051	167.487	50.724	134.154	217.639	688.971
Number of respondents	303	303	180	180	983	983

Table 6B.4 Values of Independent Variables for College Simulations

Independent variable	Simulation			
	(1) Advantaged	(2) Advantaged	(1) Disadvantaged	(2) Disadvantaged
Mother's earnings ($1000)	4.5	4.5	5	5
Mother not in household	0	0	0	0
Mother not working	0	0	0	0
Mother's education unknown	0	0	0	0
Mother's education (years)	10.9	10.9	10	10
Father's earnings ($1000)	10.6	10.6	0	0
Father not in household	0	0	1	1
Father not working	0	0	0	0
Father's education unknown	0	0	0	0
Father's education (years)	11	11	0	0
Number of siblings	2	2	4	4
Cultural index	2	2	1	1
Resided on farm at age 14	0	0	0	0
Resided in South at age 14	0	0	0	0
Resided outside U.S. at age 14	0	0	0	0
Age (years)	18	18	18	18
Current residence in South	0	0	0	0
Current residence in central city	0	0	0	0
Current residence in rural area	0	0	0	0
Local unemployment rate (%)	5	5	5	5
Vocational high school curriculum	0	0	0	0
College prep high school curriculum	0	1	0	0
Recipient of GED	0	0	0	0
Educational aspirations	0	16	0	16

Table 6D.4 continued

Independent variable	Simulation			
	(1) Advantaged	(1) Advantaged	(1) Disadvantaged	(2) Disadvantaged
Educational aspirations of friend	0	16	0	16
Aspire to professional/managerial occupation	0	0	0	0
Rotter score	0	8	0	8
KWW score	0	7	0	7
Married less than 2 months after leaving high school	0	0	0	0
Married otherwise	0	0	0	0
Child less than 9 months after leaving high school	0	0	0	0
Child otherwise	0	0	0	0

Chapter 6 Glossary

Mother's earnings = race-specific mean earnings (in thousands of dollars) in 1975 of civilian workers 18 years old and older within major occupation groups (U.S. Bureau of the Census, 1977), based upon the mother's occupation when the respondent was 14 years old--if the respondent's mother was in the household when the respondent was 14 years old

= 0 otherwise

Mother not in household = 1 if the respondent's mother was not in the household when the respondent was 14 years old

= 0 otherwise

Mother not working = 1 if the respondent's mother was present and not working when the respondent was 14 years old

= 0 otherwise

Mother's education unknown = 1 if the respondent's mother was present and her educational attainment unknown

= 0 otherwise

Mother's education = years of regular schooling completed by the respondent's mother--if the respondent's mother was in the household when the respondent was 14 years old

= 0 otherwise

Father's earnings = race-specific mean earnings (in thousands of dollars) in 1975 of civilian workers 18 years old and older within major occupation groups (U.S. Bureau of the Census, 1977), based upon the father's occupation outside the home--if the father was in the household when the respondent was 14 years old
= 0 otherwise

Father not in household = 1 if the respondent's father was not in the household when the respondent was 14 years old

= 0 otherwise

Father not working = 1 if the respondent's father was present and not working when the respondent was 14 years old

= 0 otherwise

Father's education unknown = 1 if the father was present and his educational attainment unknown

= 0 otherwise

Father's education = years of regular schooling completed by the respondent's father--if the father was present in the household when the respondent was 14 years old

= 0 otherwise

Number of siblings = number of children (including the respondent) in the household when the respondent was 14 years old

Cultural index = three-point scale indicating the presence of newspapers, magazines, and a library card in the household when the respondent was 14 years old

Resided on farm at age 14 = 1 if the respondent lived on a farm or ranch at age 14

= 0 otherwise

Resided in South at age 14 = 1 if the respondent lived in a southern state at age 14

= 0 otherwise

Resided outside U.S. at age 14 = 1 if the respondent lived in a country other than the United States at age 14
= 0 otherwise

Age = age (in years) of respondent as of January 1, 1979

Current residence in South	= 1 if the respondent presently lives in a southern state = 0 otherwise
Current residence in central	= 1 if the respondent presently lives within an SMSA or within a county with at least a 90 percent urban population = 0 otherwise
Current residence in rural	= 1 if the respondent presently lives outside an SMSA = 0 otherwise
Local unemployment rate	= unemployment rate of the county in which the respondent presently lives
Vocational high school curriculum	= 1 if the respondent followed a vocational or commercial program in high school = 0 otherwise
College prep high school curriculum	= 1 if the respondent followed a college preparatory program in high school = 0 otherwise
Recipient of GED	= 1 if the respondent has the high school equivalent or G.E.D. = 0 otherwise
Educational aspirations	= highest grade or year of regular school that the respondent would like to complete
Educational aspirations of regular school that friend	= highest grade or year of the respondent's best or closest friend wants to complete
Aspire to professional occupation	= 1 if the respondent would like managerial to be working in a professional or managerial occupation when 35 years old

= 0 otherwise

Rotter score = Rotter internality-externality locus of control test score

KWW score = Knowledge of the World of Work test score

Married less than 2 months during high after leaving high school = 1 if the respondent was married school or within two months after leaving high school

= 0 otherwise

Married otherwise = 1 if the respondent was married over two months after leaving high school

= 0 otherwise

Child less than 9 months during high after leaving high school = 1 if the respondent had a child school or within nine months after leaving high school

= 0 otherwise

Child otherwise = 1 if the respondent had a child over nine months after leaving high school

= 0 otherwise

Drop out of high school = 1 if the respondent is a high school dropout

= 0 otherwise

College enrollment = 1 if the respondent is enrolled in college

= 0 if the respondent is a nonenrolled high school graduate

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CHAPTER 7

GOVERNMENT SPONSORED EMPLOYMENT AND TRAINING

by Joan E. Crowley

The concern of policy makers with the problem of high youth unemployment, particularly among minority and low-income youth, led in 1977 to the passage of the Youth Employment and Demonstration Projects Act (YEDPA), authorizing targeted programs for youths and explicitly seeking to develop a strong knowledge base for further policy (National Commission for Employment Policy, 1979, pp. 132-122). The NLS youth survey was designed to assure that a sufficient number of youth program participants would be interviewed to allow accurate assessment of the youth participants and of their program experiences. In all, over a thousand respondents reported that they had been in some form of government training program since January 1, 1978. What follows is a description of the types of people who participated in programs, the services they received, and their attitudes toward their experiences. The decision to participate and the perceived success of the programs are explored in more depth.

I. OVERVIEW OF FEDERAL PROGRAMS

While federal government involvement with the employability of the population can be traced back at least as far as the creation of land grant colleges for education in agricultural and mechanical skills, and later to the various depression era programs to deal with the unprecedented employment crisis, current programs evolved largely from the expansion of social services during the 1960's. These programs were responses to perceived displacements of experienced workers due to changing technologies and to the rediscovery of poverty. In 1973, the Comprehensive Employment and Training Act (CETA) was passed in order to consolidate fragmented programs which had emerged piecemeal over the preceding several years into a single structure within the Department of Labor (O'Keefe, et al., 1978). CETA is by far the largest of the government funded employment and training programs. The current CETA legislation also includes the Job Corps, an intensive residential program, as well as the continuation of special youth programs originally authorized under the 1977 Youth Employment and Demonstrations Project Act (YEDPA).[1] Another major federal effort is the Work Incentive Program, commonly referred to as WIN, a "workfare" program operated jointly by the Department of Labor and the Department of Health and Human Services (U. S. Department of Labor, 1979b, pp.30-55).

Both CETA and WIN were decentralized by design, allowing units of local government to determine the appropriate ways to administer federally funded programs to meet local needs. CETA in particular was intended to replace categorical programs, seen as rigid and unresponsive, with flexible programs tailored to local conditions, but monitored and provided with technical assistance by the federal government (O'Keefe, et al., 1978). Under WIN, all welfare recipients not specifically exempted by being in a category defined as unable to work are required to register for employment services operated by the local administrative unit within a framework set down in Washington.

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[1] Apprenticeship programs are also regulated by the Department of Labor. These programs are described elsewhere in this volume.

Both CETA and WIN were authorized to provide a broad range of services, encompasing job counseling, placement, purchase of institutional skills training and basic education[2], subsidized employment of various types, supportive services such as child care or transportation, and, for WIN, tax credits to encourage employers to hire and train program participants.

II. PARTICIPATION IN EMPLOYMENT AND TRAINING PROGRAMS

One key issue in designing training programs is defining the population to be served, which in turn depends on program goals. Three goals have been identified: reduction of unemployment produced by swings in the business cycle, or so-called cylical unemployment; reduction of unemployment due to mismatch between the qualifications of potential employees and the requirements of available jobs, or structural unemployment; and provision of financial support for those who would otherwise not be able to survive at a level acceptable to society, sometimes referred to as income maintenance (Barnes, 1978).

Each goal implies a different program strategy and a different target population. Strictly speaking, countercyclical programs should be aimed at providing employment for experienced workers displaced by recession and concommitantly stimulating economic recovery by transfering money from the federal government to the private sector in the form of wages for those so employed. Income maintenance also calls for creation of jobs, but the target population includes persons in economic need, regardless of their employability. Structural unemployment problems can be met either by changing the qualifications of participants or by changing the requirements of jobs. Training and counseling programs represent efforts to change participants to fit into the labor market as it exists. An example of another structural approach is anti-discrimination effort, which tries to change the structure of employment opportunities for minorities, women, and those with other artificial barriers to employment. Any structural program, however, is of limited use if local unemployment levels are high and jobs are consequently scarce.

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[2] Purchase of training refers to such activities as paying tuition for remedial courses at the local community college, or contracting with a business college for classes in various skills to be taught to groups of CETA clients.

In practice, of course, these distinct goals and target populations merge. Participants who are being trained so that they can successfully support themselves may also need interim financial assistance. Similarly, those most vulnerable to business downswings may benefit from skills training in fields which are more economically viable.

When various early training programs were consolidated under CETA, a single agency was expected to meet all employment goals. CETA's diffuseness of purpose is reflected in its eligibility requirements. WIN, of course, has always been restricted to welfare recipients. Under CETA, originally, persons unemployed for as little as one calendar week were eligible for services under the training portion of the act, which allowed virtually a full range of activities (Barnes, 1978). Successive modifications have tightened standards, focusing increasingly on those facing the most severe barriers to employment, hence increasingly dealing with economically disadvantaged and the hard-core, structurally unemployed. YEDPA and the CETA amendments of 1978 restrict most services to persons who have been unemployed for a period of ten or more weeks, or who are economically disadvantaged, or both (U. S. Department of Labor, 1979a). Even with the increased control over enrollments, however, many services are available to those who do not meet these criteria, and the programs provide for specially designed projects which test the implications of providing services to mixed populations of disadvantaged and non-disadvantaged participants. This chapter describes the types of respondents who report having participated in any sort of government training program.

Programs completed prior to January 1, 1978 were separated from those in which youths were enrolled on or after that date. Work-study jobs were distinguished from other subsidized employment and dropped from further consideration, since their goals and participants are quite different from those of programs addressed to employability. The programs explicitly probed are listed in Table 7.1. An extensive set of questions was asked for each program which the youth reported as occuring after January

Table 7.1 Government Sponsored Employment and Training Programs

Apprenticeship Outreach Program (RTP)
CETA jobs, other
CETA Summer Program
CETA Training
Comprehensive Employment and Training Act (CETA) On-the-Job Training
In-School Work Experience Program
Job Corps
Job Opportunities in the Business Sector (JOBS)
MDTA On-the-Job Training
MDTA Training
Neighborhood Youth Corps (NYC) In-School Program
Neighborhood Youth Corps Out-of-School Program
Neighborhood Youth Corps Summer Program
Opportunities Industrialization Centers (OIC)
Public Employment Program (PEP)
Public Service Employment (PSE)
SER--Jobs for Progress
Summer Program for Economically Disadvantaged Youth (SPEDY)
Summer Youth Work Experience Program
Urban Conservation Corps
Urban League
Vocational Rehabilitation
Work Experience
Young Adult Conservation Corps
Youth Community Conservation and Improvement Program (YCCIP)
Youth Conservation Corps (YCC)
Youth Employment and Training Program (YETP)
Youth Incentive Entitlement Pilot Projects (YIEPP)
Any other government-sponsored skills training program/job

1, 1978, including programs which started before that time and continued into the new year.[3]

Most of the programs reported were identified as CETA or WIN programs, but a sizeable minority, almost two-fifths, were not. This does not mean that forty percent of the reported programs were not federally funded. In keeping with the philosophy of reliance on local resources, many of the programs funded by CETA are contracted out to a variety of community organizations under a plethora of often colorful names. Participants may well be unaware that the funding for a particular activity is coming from the federal government. Thus, the estimate of forty percent of programs being outside the federal framework is undoubtedly an overestimate.[4]

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[3] For programs in which the youth had participated before January 1, 1978 only the dates of enrollment and the name of the program were gathered. There are several justifications for this. First, the massive funding of programs specifically targeted toward youth employment problems was not available before that date. Second, the reliability of descriptions of events declines over time, as new events blur older memories. The more detailed and subjective the information required, the less accurate the answers can be expected to be, so that interpretations of material about programs which occured substantially more than one year prior to the interview can only be tentative. A third consideration is the age of the respondents. Rapid changes in focus, in the degree to which the youths have matured and in the immediacy of the entry into the labor force, make the types of programs selected more recently by youths more relevant to their current needs than are programs from a year or more in the past. Even with this time restriction a number of youths reported participating in several different programs.

[4] This characteristic of CETA makes it particularly difficult to evaluate. In addition to the diversity of program names involved with various contractors, within the CETA program are a number of specific activities with their own labels, things like the Summer Program for Economically Disadvantaged Youth (SPEDY), Public Service Employment (PSE), the Skills Training Improvement Program(STIP), and others. In some cases, too, agencies

Undoubtedly, some of the programs reported by NLS respondents are outside of both the CETA and WIN frameworks, but most of this chapter will assume that programs are CETA-type programs, operating in response to the policy mandates which applied to CETA during the period in question. This assumption will be correct for the bulk of the reported programs.

Comparison of 1979 Government Sponsored Employment and Training Participants with Nonparticipants.

Table 7.2 compares the characteristics of participants in government employment and training programs since January 1, 1978 with those of nonparticipants and the total sample.[5] Both participation rates and percentage distributions are presented.

The estimated number of youth who participated in government sponsored programs between the first day of 1978 and their interview date is 2,600,000 (7 percent), with an additional

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operating the programs which were subsummed under the CETA legislation retained their original titles. Further, if program personnel feel it appropriate, an individual may be transferred through a variety of different activities, some quite distinct from each other and others indistinguishable from the participants's point of view. There is nothing to prevent a governmental agency or other organization which receives a CETA contract to provide specified participant services from providing essentially the same services to non-CETA participants using funds from other sources. Thus, while respondents were asked to name the agency which funded their programs, it is unlikely that the answers are accurate enough for reliable analysis. Organizational information about the programs is largely unmeasured for this reason.

[5] Participant characteristics are measured as of the interview, while the programs described could have been completed a year before that. This may introduce a slight bias for such characteristics as school enrollment and income, which change over time for some respondents. The effects should be negligible, however, for the aggregate.

1,600,000 (6 percent), participating prior to that time. This leaves 28,800,000 (83 percent) who have never participated.

Recent participants are more likely than non-participants to be male, either black or Hispanic, and in the 16-19 year age range. Youths younger than 16 are not as immediately concerned with long-term employment as are those over 16. Then, too, one of the major components of the YEDPA package, the Youth Community Conservation and Improvement Program (YCCIP) is restricted to youths aged 16 to 19.

Two definitions of poverty are used in Table 7.2. In determining eligibility for services, CETA uses a special definition of income. Temporary sources, such as unemployment insurance payments are excluded, as are government transfer payments based on income, such as Aid for Dependent Children (AFDC) or Supplemental Security Income (SSI) support. This redefined income is then matched against either OMB poverty guidelines or against a proportion of the Lower Living Standard Levels (LLS), whichever is higher.[6] Persons whose income falls below the established criterion or who receive cash welfare payments are labeled economically disadvantaged. The second income classification shown is poverty as defined by the Current

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[6] The definition used in the tables is the one which matches the definition of CETA economically disadvantaged for general training programs. The criteria are income below the poverty level or below 70 percent of the lower living standard income for family size (whichever is higher), or receipt of transfer payments such as AFDC or SSI. Some specific programs under YEDPA and CETA set slightly higher levels of income for eligibility, based on percent of the lower living standard. See U. S. Department of Labor, 1979a.

Population Survey (CPS). This is the definition used in Census documents, and so our findings can be compared to published population figures.[7]

Roughly half of the program participants were economically disadvantaged, and a third were in poverty. By both criteria, the poor were three times more likely than the non-poor to enter government employment programs.[8] Government sponsored training is thus most frequently used by the target populations described in the regulations, namely, the poor and the ethnic minorities.

Because low educational attainment is seen as a barrier to employment, services should be extended to those who have not completed high school. It is appropriate that high school dropouts have a slightly higher participation rate than graduates or those still in school.

About one third of those who participated in 1978 had at some time been enrolled in another program (Table 7.2). Of those who did not participate in 1978, about six percent had had some government sponsored training, and of these about one third had

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[7] Unlike the OMB poverty level which is established on a national basis, the LLS adjusts for variations in the local cost of living. In most areas, 70% of the LLS is somewhat higher than the OMB poverty level for families of comparable size.

[8] The estimated proportions of poor who are enrolled in employment programs may be somewhat conservative, in that family income was computed over the period of a full 12 months for the NLS, while for the actual determination of CETA eligibility family income may be computed for a six month period and extrapolated to a full year. If family income fluctuates for a given family, as it would due to the loss or gain of employment by family members, a person validly categorized as economically disadvantaged upon entry to a CETA program could be categorized as non-disadvantaged in the NLS.

Table 7.2 Comparison of Government Employment and Training Participants with Nonparticipants, by Selected Characteristics

(Percentage distributions)

Characteristic	Participation rate per 100 population	Participant since 1-1-78	Nonparticipant since 1-1-78	Total
Sex				
Female	7	47	49	49
Male	7	53	51	51
Total percent		100	100	100
Race				
Black	18	35	12	14
Hispanic	12	11	6	6
White	5	54	82	80
Total percent		100	100	100
Age				
14-15	5	16	24	23
16-17	8	31	25	20
18-19	9	32	24	24
20-21	6	22	27	27
Total percent		100	100	100
Enrollment status				
High school dropout	10	14	10	10
High school student	7	51	50	50
College student	6	13	16	16
Nonenrolled high school graduate	7	22	23	23
Total percent		100	100	100
Region				
Northeast	7	22	21	21
North central	6	28	31	31
South	7	31	31	31
West	8	19	16	16
Total percent		100	100	100
Number of programs ever				
None	0	0	94	87
One	53	66	4	9
More than one	59	34	2	4
Total percent		100	100	100

Table 7.2 continued

Characteristic	Participation rate per 100 population	Participant since 1-1-78	Nonparticipant since 1-1-78	Total
Poverty				
CETA disadvantaged	15	47	20	25
CETA nondisadvantaged	5	53	80	78
Total percent		100	100	100
CPS below poverty	15	33	14	15
CPS above poverty	5	67	86	85
Total percent		100	100	100
Percent of sample		7	93	100

Universe: Civilians age 14-21 on January 1, 1979 (N = 32,800,000) been in multiple programs. No major differences appeared between the characteristics of participants in single programs and those in multiple programs.[9]

Multivariate analysis Of course, many of the characteristics shown in Table 7.2 are not independent of each other. Ethnicity and income are linked, as are age and education. Multivariate modeling of participation since 1978 can help to untangle the independent effects of these variables.

The variables selected for description of program participants can be used to define target groups for service delivery. Additionally, however, it is of some interest to know if family background, more fully defined, affects the decision to apply for government services. Two sets of variables were specified. The first included demographic information--sex, race, region of country, economic status by CETA definition, enrollment status, a dummy variable for completion of a high school diploma, and age, expressed as three dummy variables, contrasting 14-15, 16-17, and 18-19 year olds with those who were 20-21. This coding allowed for nonlinearity in the effect of age for those who were either under the age where working is allowed without a special permit (16), or who had reached the age of transition out of school. Educational attainment was not included because for such youthful respondents, it correlates strongly with age and is thus inappropriate in the same model.

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[9] See Table 7.A1 for details.

The local unemployment rate was included as an indicator of local economic conditions.

The second set of variables indexes more qualitative measures of life stage and social background. This set includes the education of the parents as a rough measure of the social class of the family in which the respondent was raised; the number of siblings; a series of dummy variables contrasting those who at age 14 were living in "intact" families with those who were living with their mothers only, with a stepparent, or in some other arrangement; a dichotomous variable indicating financial independence coded 1 if no one but the respondent or the respondent's spouse provided more than 50% of the individual's income. Economic emancipation increases both the need for income and the cost to the individual of postponing labor market entry to get additional training.

Analyses were run separately for the major ethnic groups, as well as for the total sample. Interaction terms were included to allow for qualitative differences in the ways that young men and young women decide to enter training.[10]

Table 7.3 shows the results for the model. By far the strongest predictor of participation for the total sample, all other things being equal, is race. Blacks have a higher participation rate than whites; the coefficient for Hispanics is also substantial, but only about half that of blacks. Income, at

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[10] The relatively small proportion of participants relative to non-participants in the total sample, particularly among the whites, makes standard multiple regression analysis techniques inappropriate, so Probit analysis was used.

Table 7.3 Probit Analysis:[a] Participation in Government Sponsored Employment and Training Programs Since January 1, 1978, by Demographic Characteristics and Family Background

Variables	Total sample	Black	Hispanic	White
Constant	-1.24	-.980	-1.52	-.954
	(-4.20)	(-1.82)	(-2.25)	(-2.11)
Age				
14-15	-.185	-.460	.518	-.326
	(-.77)	(-1.13)	(.91)	(-.89)
16-17	-.059	-.257	.576	-.238
	(-.26)	(-.68)	(1.08)	(-.69)
18-19	-.041	-.240	.531	-.166
	(-.23)	(-.77)	(1.24)	(-.63)
Enrollment status	-.132	-.242	-.291	-.042
	(-3.04)**	(-3.11)**	(-2.85)**	(-.66)
Diploma	-.289	-.427	.338	-.367
	(-1.72)	(-1.48)	(.87)	(-1.41)
Family background				
Independence	-.487	-.558	-.560	-.572
	(-2.84)**	(-1.88)	(-1.44)	(-2.16)*
Ever married	-.035	-.929	.930	-.452
	(-.12)	(-.96)	(1.74)	(-1.06)
Economically disadvantaged	.622	.520	.267	.839
	(5.27)**	(2.41)*	(.98)	(4.74)**
NA poverty	-.047	.093	-.234	-.122
	(-.18)	(.22)	(-.36)	(-.29)
Local unemployment rate	.026	.138	.030	.005
	(.36)	(.89)	(-.22)	(.05)
Father's education	-.019	.012	-.017	-.035
	(-3.64)**	(1.20)	(-1.64)	(-4.32)**
Number of siblings	.021	.025	.018	.035
	(3.02)**	(2.41)*	(1.24)	(2.95)**
Single parent	.410	.183	.444	.587
	(2.96)**	(.83)	(1.41)	(2.58)*
Step parent	.402	-.448	1.55	.506
	(2.06)*	(-1.22)	(3.18)**	(1.82)
Other family structure	.301	.308	.425	.192
	(1.48)	(.99)	(.90)	(.537)
Female (sex)	-.231	.075	-.095	-.468
	(-1.29)	(.23)	(-.23)	(-1.73)
SMSA	-.110	-.082	.050	-.187
	(-2.63)**	(-1.07)	(.454)	(-3.14)**
Region				
Northeast	.002	.018	-.020	-.049
	(.03)	(.18)	(-.13)	(-.65)
South	-.204	-.293	-.312	-.140
	(-4.22)**	(-3.69)**	(-1.98)	(-1.98)*
West	.023	-.139	-.071	.122
	(.41)	(-1.02)	(-.49)	(1.57)
Race				
Black	.450	-	-	-
	(10.23)**			
Hispanic	.198	-	-	-
	(3.63)**			

Table 7.3 (continued)

Variables	Total sample	Black	Hispanic	White
Interaction terms				
Sex with:				
Diploma	.172	.243	-.155	.230
	(1.64)	(1.35)	(-.63)	(1.41)
Ever married	-.124	.224	-.67	.121
	(-.76)	(.44)	(-2.11)*	(.52)
Mother only	-.079	-.012	-.11	-.111
	(-.89)	(-.08)	(-.54)	(-.77)
Stepparent	-.138	.365	-1.06	-.189
	(-1.09)	(1.60)	(-2.91)*	(-1.06)
Other family structure	-.028	-.052	-.017	-.056
	(-.22)	(-.26)	(-.06)	(-.25)
14-15 years old	-.105	-.043	-.546	.029
	(-.68)	(-.16)	(-1.48)	(.12)
16-17 years old	.100	.144	-.197	.224
	(.72)	(.60)	(-.59)	(1.05)
18-19 years old	.169	.275	-.038	.195
	(1.56)	(1.44)	(-.14)	(1.23)
UI rate	.039	-.104	.092	.081
	(.86)	(-1.07)	(1.06)	(1.20)
Independence	.257	.269	.305	.324
	(2.46)*	(1.51)	(1.25)	(2.03)*
Poverty	-.186	-.274	.057	-.221
	(-2.50)*	(-2.12)*	(.33)	(-1.98)*
NA poverty	-.054	-.091	.075	-.054
	(-.32)	(-.34)	(.17)	(-.20)
Calculated proportion participated at point of means	.082	.161	.101	.048
X^2	748.30	138.54	151.15	362.23
Number of respondents	10,758	2,640	1,804	6,314

[a] Figures in columns represent the coefficient. Numbers in the parentheses are the ratios of the estimators to their standard error, roughly analogous to a t-test.

UNIVERSE: Civilians age 14-22.

*Significant at .05 level.
**Significant at .01 level.

least as defined in terms of CETA economically disadvantaged, is fairly strongly associated with participation in the sample as a whole, with a significant interaction with sex. The positive effect of poverty on participation for young men is stronger than for young women.

Parental education was included in large part as an indicator of the youth's social class during childhood, since family income was based simply on the previous year's income and might not be reliably associated with past levels. This variable predicts participation very strongly for whites, but is not significant for minorities. For whites and to a small extent for Hispanics, the lower the father's education, the higher the probability of participation. For blacks, the trend is in the opposite direction.

Although the enrollment rates of minorities were expected to be higher in areas where they live in greatest concentration--the South for blacks and the South and West for Hispanics--the results were to the contrary. Taking into account social class and family characteristics, residing in the South is associated with lower participation rates than living in any other region. This was not indicated in Table 7.2, where Southern residents did not differ from those in other regions in their participation rate.

While youth unemployment is sometimes considered an urban problem, youths in the city are actually less likely to participate than are their rural counterparts. The effect is significant only for whites and for the total sample, but the sign is consistent for blacks also. Enrollment status was significantly related to participation for minorities, with those out of school more likely to participate. The effect for receipt of a high school diploma, however, is not significant.

Family composition is systematically related to program participation for all groups. In general, youths living with their mothers only, with stepparents, and in other types of families at age 14 were more likely than those who were living with both natural parents to have participated, even with income status and father's education controlled. The effect is most pronounced and consistent for mother-only families. The results for Hispanics show a pattern of relationships between sex, family composition, and participation in employment training which does not appear for the other two ethnic groups. For Hispanics, both marriage and being raised in a family with a stepparent are related to higher participation rates among young men, and to substantially lower participation rates among young women, as compared with never married respondents and those raised in intact homes. Young men living with both natural parents at age 14 had lower participation rates than those from other family types. For young women, however, being in a family with two parents, whether or not both were the natural parents, was associated with lower participation rates. In fact, young women raised in families with a stepparent had lower participation rates than those from intact homes. While marital status was not a significant predictor for whites, financial independence was for males only. Young men who reported that they did not receive more than half of their financial support from any one (besides themselves or their wives) were less likely than their dependent counterparts to participate in training. Although the interaction between sex and financial independence may indicate that, for young women, the inclusion of the husband's income as own support for defining independence blurred the distinction between independence from the parental family (family of origin) and financial responsibility, this plausible interpretation is somewhat disputed by the lack of effect of the marital status variable.

The more siblings in the family, the more likely youths are to participate in employment and training programs, probably because family members who are eligible know about the program, and are more likely to take advantage of the services themselves.

Those who enter government training programs tend to be the most disadvantaged, as measured by race and income. The high participation rates of minorities in programs are not simply functions of income or family background. Minority group status continues to be the strongest single predictor of participation. Those from disrupted homes tend to turn to government programs for services more often than those from two-parent families. Participation rates are lower in the South than in other regions, even taking race and income into account, and lower in cities than in rural areas.

III. PROGRAMS AND PARTICIPANTS

This section describes the types of services involved in government employment and training programs, and investigates the types of participants most likely to receive those various services. Since many respondents had been in more than one program, the rest of the data in the chapter are based on enrollments in programs, rather than on numbers of participants. That is, each enrollment is treated as a separate case.[11]

Characteristics of Participants by Type of Program

While it would be desirable to evaluate programs according to administrative category, we did not expect that participants would be able to reliably make the necessary distinctions. However, some differentiations among major program types can be based on information provided by the participants. First, using the beginning and ending dates for each enrollment, summer programs can be distinguished from year-round programs. Historically, summer employment programs have had more limited goals than the "regular" programs in terms of lasting impact on the employability of participants and on placing them in the unsubsidized labor force (National Commission for Employment Policy, 1979). Instead, a major function of the summer youth programs has been income maintenance. Second, the school enrollment status of the participant can be used to identify participants and programs that are likely to aim for immediate employability as opposed to more general preparation for later entry into the labor force. Using these two characteristics, we developed four types of programs for comparison: summer programs for unenrolled youths, summer programs for enrolled youths, year-round programs for unenrolled youths and year-round programs for enrolled youths (Table 7.4).[12]

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[11] For weighted analysis, the population weights of the participant was applied to each program reported.

About equal numbers of students and non-students participate in year-round programs, but summer program participants are predominantly students. In all, about one third of the programs are listed as being only summer programs.

The small group of non-student summer participants tends to be disproportionately male, white, and in the 18-19 year age bracket, probably youths just leaving high school and taking summer jobs with government programs before entering the unsubsidized labor market. The pattern of participation in summer programs may be influenced by the use of schools to recruit eligible youths. A certain proportion of the year-round enrolled youths are in college, with some of them no doubt attending as part of their training program.[13] The relatively high average age of year-round program participants is consistent with use of government training as a supplement for training

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[12] An attempt was made to separate subsidized employment from skills training programs. Preliminary analysis, however, showed that the various types of services reported by participants were so intertwined that such a distinction was not useful.

[13] Regulations prohibit training programs lasting more than two years. However, many community colleges and four-year colleges offer training programs which fall well within this limit.

Table 7.4 Demographic Distribution of Participants, by Type of Program

(Percentage distributions)

Demographic characteristics	Summer, not enrolled	Summer, enrolled	Year-round, not enrolled	Year-round, enrolled	Total
Sex					
Female	40	48	50	54	48
Male	60	52	50	46	52
Total percent	100	100	100	100	100
Race					
Black	29	46	28	35	35
Hispanic	7	10	11	12	11
White	64	44	61	53	54
Total percent	100	100	100	100	100
Age					
14-15	4	28	1	15	13
16-17	20	48	7	42	30
18-19	52	18	46	30	34
20-21	25	6	47	13	24
Total percent	100	100	100	100	100
Enrollment status					
High school dropout	51	0	36	0	16
High school student	0	85	0	77	48
College student	0	15	0	23	12
Nonenrolled high school graduate	49	0	64	0	25
Total percent	100	100	100	100	100
Educational attainment					
0-8	15	19	7	12	12
9-11	32	68	29	64	51
12	45	7	57	10	28
13 or more	8	6	6	14	9
Total percent	100	100	100	100	100
Region					
Northeast	26	21	21	20	21
North central	41	31	28	27	30
South	23	35	30	30	31
West	10	13	21	24	19
Total percent	100	100	100	100	100

Table 7.4 (continued)

Demographic characteristics	Summer, not enrolled	Summer, enrolled	Year-round, not enrolled	Year-round, enrolled	Total
Number of programs ever					
1	74	86.	68	69	74
2	14	13	20	26	19
3-5	12	1	12	6	7
Total percent	100	100	100	100	100
Poverty					
CETA disadvantaged	86	88	85	87	87
CETA not disadvantaged	14	12	15	13	13
CPS below poverty	56	43	50	40	45
CPS above poverty	44	57	50	60	55
Total percent	100	100	100	100	100
Percent of sample	7	28	34	31	100

Universe: Enrollments by civilians age 14-21 on January 1, 1979 in government sponsored employment and training programs since January 1, 1978. (N=2,558,000) within the regular school system, or as a remedial program for youths who did not reach employable skill levels before leaving school.

Most of the enrolled participants are still in high school. The figures for the unenrolled, however, show a bleaker picture. Among the summer group, 15 percent have an eighth grade education or less. Almost a third have between a ninth and eleventh grade education. The figures for the year-round unenrolled participants show 7 percent completing eighth grade or less, and 30 percent with ninth to eleventh grade attainment. Thus, substantial numbers of participants are out of school and nowhere near a high school degree.

Programs in the western states are disproportionately likely to be year-round, particularly for programs involving enrolled participants. Northeastern and North central states, on the other hand, tend to have more summer programs. These regional differences in the composition of programs affect the regional distributions of other program characteristics, since the summer/enrollment typology is associated with different employment goals and with different target populations.

Table 7.6 also shows the number of training programs in which the youths had ever been enrolled. Compared to any other group, the summer enrolled participants report the fewest programs. Since summer participants are younger than those in year round programs, the simplest explanation is that they have had less opportunity for repeated enrollments.

Program Services

Respondents were asked if they had received any of a list of possible services for each program reported.[14] Figure 7.1 shows the percentage of programs which involved each type of service. Percentages add to considerably more than 100, since each respondent could receive any combination of services within a single program. In fact, the average number of services per program was around three.

Figure 7.1 shows that the most common services of government training programs are subsidized employment[15] and counseling. Non-CETA job placements, that is reports that the program had placed the participant in an unsubsidized job as part of program services were reported in about 9% of the enrollments. This does not mean that only 9% of the enrollees got jobs: many find employment through their own efforts, perhaps aided by their program experiences, but they may not consider such placements as

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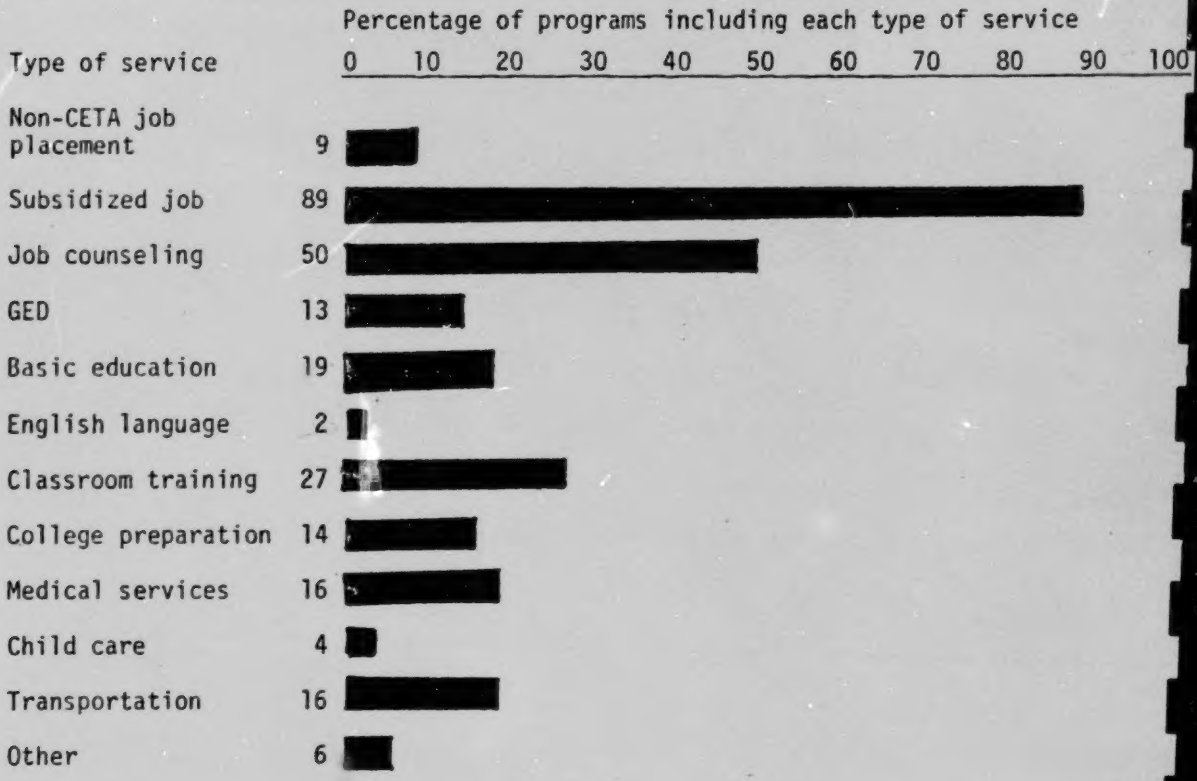
[14] As with the previous section, all of the analysis will be done by program, rather than by respondent.

[15] This combines all possible types of subsidized positions: work experience, on-the-job training, and public service employment. Work experience refers to short-term placements in public or private-non profit organizations, designed to give participants experience with the requirements of work in general. Public service employment refers to jobs funded by the government for longer periods of time, frequently as part of a counter-cyclical program to increase the supply of jobs. On-the-job training subsidizes the employer for up to half of the wages of participants during a specified training period. The idea is for an employer to hire an individual who would not be qualified for a job otherwise, and for the government to pay the expenses associated with upgrading the employee to the usual entry level skills for the position. Unlike other subsidized job activities, on-the-job training slots can be created within the private for profit sector.

Figure 7.1 Distribution of Services Received in Government Training Programs



Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978. (N=2,558,000)

part of the services they received from their programs.

Several types of classroom training services were distinguished: the most common service reported was classroom training for particular job skills. A large proportion of programs included remedial education like preparation for the GED, plus basic education, or college preparatory classes.

Services not directly associated with the employability of the participant but which facilitate either training or work are referred to in employment programs as supportive services, of which three types were explicitly probed. Medical and transportation assistance were each reported in about one sixth of the programs. Childcare was reported in a much smaller proportion of cases. These supportive service distributions probably reflect in part the age limitations of the sample, since many do not have access to cars, and very few have children. Responses in the "other" service category are largely meals and bus tokens.

Services Received by Types of Participant

Table 7.5 shows the percentages receiving each of the types of services measured, broken down by race and sex. No substantial differences are observed in the proportions of males and females receiving medical care or transportation assistance, but child care, the least common of all the listed services, was much more likely to be received by females.

The largest differences by sex are in the categories of classroom training. Women are more likely than men to receive

Table 7.5 Proportion of Participants Receiving Various Services, by Sex and Race

Type of service	Sex		Race			
	Female	Male	Black	Hispanic	White	Total
Job counseling	49	47	54	53	44	48
Basic education	22	17	21	27	16	19
English language	2	2	2	10	1	2
GED	12	13	14	16	11	13
College preparatory	18	11	19	17	10	14
Skills	33	22	29	28	25	27
Subsidized job	88	90	89	88	90	89
Non-CETA job placement	8	10	7	12	10	9
Medical	15	16	17	22	13	16
Child care	6	2	7	4	2	4
Transportation	17	14	16	15	15	16
Total	48	52	35	11	54	100

Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978. (N=2,558,000)

skills training, college preparation, and basic education. It has been consistently found that girls do better in school, on the whole, than do boys. The greater frequency of females in classroom training programs may be a function of the greater acceptability of these activities to people with more successful experiences with education generally. Alternatively, the difference may reflect the persistence of traditional sex distribution of occupations. Many traditionally female jobs require specialized training in such skills as typing or medical technology, which are not acquired on the job. On the other hand, many of the skilled trade jobs held by men are learned through formal or informal on-the-job training. Either of these processes may contribute to the greater participation of women in classroom training.

Child care is most likely to go to blacks, while Hispanics are most likely to receive medical care. Hispanics, and, to a lesser extent, blacks, are overrepresented in GED, English language, and basic education. Whites are at least marginally underrepresented in all categories except subsidized and non-CETA job placement, implying that they tend to receive fewer total services. Most of these ethnic differences probably reflect differential assessments of the employability problems of the minority groups, both by agency staff and by the participants themselves.

Most of the programs reported were described within the work history section of the interview. A later section probed for government training programs not associated with jobs. High school students were skipped over this section, so the proportion of high school students reporting subsidized placements is virtually 100%. Separate analyses of responses for subsidized job programs alone show no substantial differences from the results presented.[16] Even taking this artifact into consideration, the pattern shown in Table 7.6 for enrollments by educational status for classroom training is expected from the presumed needs of the participants. Generally, high school students report the lowest level of classroom training, in all of the categories. Over a third of the high school dropouts report getting GED training. Youths who are out of school are more likely than students to get job counseling and non-CETA job placements. Patterns for supportive services are not so clearly related to educational status, though each of the services listed is most frequently reported by dropouts.

Summer programs offer a more limited variety of services than year-round programs (Table 7.7).[17] Over 99 percent of the

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[16] Respondents were asked to report all jobs they had held and each job was classified by whether or not it was part of a government program. Later in the interview, youths were asked if they had gotten any other government sponsored training. To save time on the lengthy interview, high school students were skipped out of this section. Since students have access to classroom training through the school system, YEDPA programs for these youths focus on subsidized jobs and services designed to facilitate the transition from school to work. The skipping out of high school students from the "other government training" section should therefore not substantially affect results. The restriction of the analysis to programs including subsidized employment simply increases the proportion of participants who are in high school relative to the other enrollment groups. The patterns remain essentially the same, although comparisons with high school enrollees are somewhat less pronounced. Results for the restricted sample are shown in Appendix Table .A2.

Table 7.6 Proportion of Participants Receiving Various Services, by Enrollment Status

Services provided	High school dropout	High school student	College student	Nonenrolled high school graduate	Total
Job counseling	55	44	37	56	48
Basic education	30	13	7	35	19
English language	4	2	0	2	2
GED	34	7	5	13	13
College preparatory	15	14	18	12	14
Skills training	34	19	28	36	27
Subsidized job	75	100	87	79	89
Non-CETA job placement	10	6	7	17	9
Medical	24	11	14	20	16
Child care	6	4	4	3	4
Transportation	27	16	8	11	16
Total	15	48	11	25	100

Universe: Enrollment of civilians age 14-21 on January 1, 1979, in employment and training programs since January 1, 1978. (N=2,558,000)

Table 7.7 Proportion of Programs Providing Various Services, by Types of Program

Services provided	Summer, not enrolled	Summer, enrolled	Year-round, not enrolled	Year-round, enrolled	Total
Job counseling	51	39	57	46	45
Basic education	10	12	32	14	19
English language	1	2	3	2	2
GED	10	6	23	8	13
College preparatory	6	13	15	17	14
Skills training	11	19	39	24	27
Subsidized job	89	99	75	96	89
Non-CETA job placement	5	4	16	8	9
Medical	9	10	24	13	16
Child care	1	5	4	3	4
Transportation	9	17	19	12	16
Total	7	28	34	31	100

Universe: Enrollment of civilians age 14-21 on January 1, 1979, in employment and training programs since January 1, 1978. (N=2,558,000) summer participants who are students receive a subsidized job, but in no other placement or training service are these youths overrepresented. In contrast, the year-round nonstudent participants are more likely than other groups to receive any one of the entire list of services, except subsidized work. Nonstudents are more likely than students to receive job counseling, regardless of the time of their program.

Occupational Distribution of Training Programs

Table 7.8 shows the occupational distribution of training programs.[18] Pronounced differences appear between the distribution of occupations in classroom training and the distribution in subsidized employment. The most frequently reported type of classroom training was clerical, followed by service occupations, crafts, and professional and technical fields. Subsidized jobs, in contrast, tended to be much more concentrated in the lower skill occupational categories, unskilled labor, and service. Correspondingly fewer subsidized jobs were in professional or skilled labor positions. Only the clerical and service fields command a substantial proportion of

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[17] The failure to probe high school youths for training programs other than those which provided subsidized employment clearly will affect the distributions for program type. Again, however, restricting analysis to subsidized job programs reveals that the patterns observed vary only slightly from those obtained with the full set of enrollments. These results are shown in Appendix Table 7.A3.

[18] Three digit Census codes were determined for each job or training program, then reduced to the twelve major job types in that classification system.

both subsidized employment and classroom training. The frequency of placement in clerical, unskilled labor and service occupations is largely because participants can be placed in such positions with a minimum of preparation, at relatively low wage levels, and such jobs can easily be established within an on-going agency. It has become CETA policy to emphasize entry-level positions in subsidized employment programs for several reasons. For a given amount of money, a local organization operating employment and training programs can create a larger number of jobs in low skill positions than in high skills ones. Also, since one of the major criteria on which CETA programs and placements are evaluated is the rate at which individual participants can be moved into unsubsidized employment, there is a conflict of interest when the employing agency trains an individual in specific skills which would be lost if that person took another position. By providing low skill, entry level positions, the employment sites avoid major disruptions as the individual workers leave the program.

Because several categories of occupations contained too few cases for analysis, the coding was further collapsed into five major occupational areas: professional and managerial, clerical and sales, skilled labor and crafts, unskilled labor, and services (Table 7.8). Table 7.9 shows the occupational distribution of classroom training among demographic groups. As usual, there are major differences by sex. Young women constitute over four-fifths of the participants in clerical, professional and managerial training. Young men dominate the skilled and unskilled labor fields only slightly less strongly

Table 7.8 Occupational Areas of Training

(Percentage distributions)

Occupation	Classroom training[a]	Subsidized employment[b]
Professional, managerial	12	4
Professional	12	4
Managerial	0	c
Clerical, sales	37	25
Clerical	36	24
Sales	1	1
Skilled labor, crafts	21	12
Crafts	13	7
Operatives, nontransport	8	4
Operatives, transport	c	c
Unskilled labor	6	20
Laborers, nonfarm	6	19
Farmers	0	c
Farm laborers	c	1
Private household	c	1
Service	23	38
Total percent	100	100

[a] Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978, which provided classroom training for occupation skills. (N=589,800)

[b] Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978, which provided subsidized employment. (N=2,448,700)

[c] Percentage is between 0.1 and 0.5.

Table 7.9 Types of Classroom Occupation Training, by Selected Characteristics

(Percentage distributions)

Characteristics	Professional	Clerical, sales	Skilled labor, crafts	Unskilled labor	Service	Percent of universe
Sex						
Female	85	80	22	*	48	58
Male	15	20	78	*	52	42
Total percent	100	100	100	*	100	100
Race						
Black	42	47	36	*	33	39
Hispanic	9	10	16	*	8	11
White	49	44	48	*	59	50
Total percent	100	100	100	*	100	100
Age						
14-15	*	8	*	*	*	8
16-17	46	20	25	*	22	25
18-19	29	27	31	*	39	32
20-22	19	45	38	*	31	35
Total percent	100	100	100	*	100	100
Enrollment status						
High school dropout	11	9	43	*	18	19
High school student	44	37	20	*	37	35
College student	24	17	2	*	5	12
Nonenrolled high school graduate	21	37	36	*	40	35
Total percent	100	100	100	*	100	100
Region						
Northeast	3	17	12	*	24	16
North central	29	29	29	*	31	28
South	41	38	39	*	32	38
West	19	16	21	*	13	18
Total percent	100	100	100	*	100	100
Poverty						
CETA disadvantaged	26	59	44	*	44	47
CETA not disadvantaged	74	41	56	*	56	53
CPS below poverty	15	46	40	*	35	38
CPS above poverty	85	54	60	*	65	62
Total percent	100	100	100	*	100	100

Table 7.9 (continued)

Characteristics	Professional	Clerical, sales	Skilled labor, crafts	Unskilled labor	Service	Percent of universe
Type of program						
Summer, not enrolled	*	*	*	*	*	2
Summer, enrolled	40	19	9	*	12	19
Year-round, not enrolled	30	46	76	*	54	52
Year-round, enrolled	28	34	12	*	31	27
Total percent	100	100	100	*	100	100
Total	12	37	21	6	23	100

*Insufficient number of sample cases.

Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored training programs since January 1, 1978, which provided classroom training for occupational skills. (N=589,800) than women dominate their typical fields. Service is the most evenly divided of all categories, although women are somewhat underrepresented, Within the various occupations which make up the service category, men and women are likely to be as strongly segregated as they are in the general population.

Race differences are considerably less dramatic, and to some extent run counter to the distributions found in the general labor market. Blacks are more likely than others to be in professional or clerical classes. Hispanics are overrepresented in the skilled labor category, as are whites in classroom training for service and unskilled labor. The poor are overrepresented in classes for clerical occupations and underrepresented in classes in professional or technical fields.

The demographic distributions of subsidized job placements also reflect the different purposes of programs and goals of participants (Table 7.10). Summer program participants are especially likely to be in unskilled labor positions; while year round program participants have a relatively large proportion of clerical placements. Year-round student program participants are overrepresented in the professional and service categories, as are year-round out of school participants in skilled labor positions. These variations by type of program probably account for many of the demographic patterns in occupation of placement. Thus, high school enrollees and the younger participants tend to be placed in unskilled occupations and college students are conspicuous by their predominance in professional fields.

Table 7.10 Types of Subsidized Employment, by Selected Characteristics

(Percentage distributions)

Characteristics	Professional, managerial	Clerical, sales	Skilled labor, crafts	Unskilled labor	Service	Total
Sex						
Female	43	88	26	20	43	48
Male	57	12	74	80	57	52
Total percent	100	100	100	100	100	100
Race						
Black	35	35	38	27	39	35
Hispanic	13	12	12	8	10	11
White	52	53	50	66	51	54
Total percent	100	100	100	100	100	100
Age						
14-15	6	5	6	19	19	13
16-17	26	26	28	33	34	31
18-19	31	34	39	29	33	33
20-22	38	35	28	19	14	23
Total percent	100	100	100	100	100	100
Enrollment status						
High school dropout	4	7	35	22	11	15
High school student	37	36	27	58	61	49
College student	48	18	7	7	9	12
Nonenrolled high school graduate	11	38	31	14	19	24
Total percent	100	100	100	100	100	100
Region						
Northeast	21	24	21	16	22	21
North central	40	25	21	38	31	30
South	22	31	38	25	32	31
West	17	19	20	22	15	18
Total percent	100	100	100	100	100	100
Poverty						
CETA disadvantaged	44	45	51	38	47	45
CETA not disadvantaged	56	55	49	62	53	55
CPS below poverty	28	34	38	32	33	33
CPS above poverty	72	66	62	68	67	67
Total percent	100	100	100	100	100	100

Table 7.10 (continued)

Characteristics	Professional, managerial	Clerical, sales	Skilled labor, crafts	Unskilled labor	Service	Total
Type of program						
Summer, not enrolled	3	5	7	8	6	6
Summer, enrolled	33	17	14	46	31	28
Year-round, not enrolled	14	42	61	28	25	33
Year-round, enrolled	50	36	17	18	38	32
Total percent	100	100	100	100	100	100
Total	4	25	12	20	39	100

Universe: All government programs since January 1, 1978, which provided subsidized employment. (N=2,448,700)

In job placement as in classroom training, men and women are highly segregated along traditional lines, while minorities are somewhat overrepresented in the professional and skilled labor categories. The distinctions by poverty status, the concentration of the poor in clerical areas and their underrepresented work in professional and technical fields, as found for classroom training, do not show up for subsidized employment. If anything, there is a tendency for the poor to be in craft occupations and for the non-poor to be in unskilled labor.

Reasons for Entering Employment and Training Programs

Respondents were asked their main reasons for enrolling in each program (Table 7.11). By far the most common response, especially for males, high school students, and younger participants, was to make money. The only other reasons mentioned by more than 10 percent of the respondents were to get a job and to get job training, which were particularly important for out of school youth.

Hispanics and blacks are more likely to mention job training as their goal, while whites are more likely to mention simply getting a job. Interestingly, given the marked differences in labor market patterns between men and women, there were no major gender differences in reason for enrolling.

Age and school enrollment effects are much stronger than race effects, probably reflecting changes in motivation as transition from school to full time employment becomes an

Table 7.11 Reasons for Entering Government Employment and Training Programs, by Selected Characteristics

(Percentage distributions)

Demographic characteristics	Make money	Get a better job	Get a job	Get job training	Do something	Program was interesting	Other	Total percent
Sex								
Female	38	4	24	17	6	3	8	100
Male	41	3	24	16	3	3	10	100
Race								
Black	41	3	23	18	6	3	7	100
Hispanic	35	3	23	21	5	4	10	100
White	40	4	25	15	3	3	10	100
Age								
14-15	57	1	20	4	7	4	6	100
16-17	51	2	19	11	6	3	8	100
18-19	37	4	24	18	4	3	9	100
20-21	18	6	32	28	2	3	11	100
Enrollment status								
High school dropout	27	11	25	19	2	1	15	100
High school student	54	1	19	10	7	4	6	100
College student	42	3	14	19	4	2	16	100
Nonenrolled high school graduate	18	4	38	26	2	4	8	100
Educational attainment								
0-8	50	a	19	8	8	5	10	100
9-11	47	4	21	13	5	2	8	100
12	23	5	34	26	2	3	8	100
13 or more	34	0	19	19	4	6	18	100
Region								
Northeast	35	2	28	14	6	4	11	100
North central	43	3	28	12	3	3	8	100
South	39	5	22	17	5	3	8	100
West	37	4	18	21	4	4	11	100
Number of programs ever								
1	38	3	24	14	5	4	11	100
2	43	5	24	20	3	2	3	100
3-5	40	1	21	26	1	0	9	100

Table 7.11 (continued)

Demographic characteristics	Make money	Get a better job	Get a job	Get job training	Do something	Program was interesting	Other	Total percent
Poverty								
CETA disadvantaged	43	3	22	15	5	3	9	100
CETA not disadvantaged	37	4	25	17	4	4	10	100
CPS below poverty	42	2	22	16	6	2	9	100
CPS above poverty	38	3	24	18	4	4	10	100
Type of program								
Summer, not enrolled	41	4	29	12	3	5	5	100
Summer, enrolled	52	2	19	7	11	3	6	100
Year-round, not enrolled	19	7	33	25	1	3	12	100
Year-round, enrolled	52	1	17	16	2	4	9	100
Total	40	4	24	16	4	3	9	100

Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978. (N=2,558,000)

[a] Percentage is between 0.1 and 0.5.

immediate goal. Older youth and those out of school are more focussed on getting a job, getting a better job, and getting job training, while those in the younger age groups and students are disproportionately likely to say that they entered the program to make money. The distribution by type of program shows highly similar patterns of motivation for enrolled youth, whether they are in summer or year-round programs.

Motivation to enter programs is fairly independent of income. What differences exist are in the expected direction, with those who are labeled poor being more likely to say that they entered the program to make money.

Reasons for Leaving Government Employment and Training

Participants were asked their reasons for leaving government programs. Responses were coded into categories based largely on previous work on job turnover and can be classified as involuntary or voluntary. As shown in Table 7.12, involuntary reasons, including layoffs, discharges, and program endings, account for some two-thirds of the participants. Almost half of the participants reported that they left because of the end of the program. It is not known how many of those who reported layoffs were actually scheduled program terminations and how many were let go for other administrative reasons. Less than three percent of the participants reported leaving a program because they had been fired or expelled.

Voluntary reasons for leaving were considerably more varied. No one reason accounted for more than six percent of the programs. The most common single reason for leaving voluntarily was that the participant had found another job.

In order to get an idea of the way in which the reasons for leaving programs might vary according to characteristics of the participants and the programs, it was necessary to group the responses as shown in Table 7.12. Six categories are distinguished: laid off or fired, program ended, family and pregnancy, working conditions, other voluntary, and other. The two categories family and pregnancy and working conditions are reported very infrequently, making their interpretation quite tentative.

The distribution of reasons for leaving programs by race, sex, and enrollment shows few striking findings (Table 7.13). The only sex difference, that most of those leaving for family reasons are female, is to be expected. Males are somewhat more likely than females to say that they were laid off.

Minorities, especially blacks, were more likely than whites to say that they left involuntarily. Whites and Hispanics are more likely than blacks to say that they left because of working conditions, which may reflect a perception of relatively limited employment opportunity among blacks.

Students, especially those in high school, are most likely to report leaving for involuntary reasons, primarily because of programs ending. They are underrepresented in all other categories, paralleling the pattern for type of program. Out of school youth are the only ones to report leaving for family reasons with any frequency, though some of the dropouts may have

Table 7.12 Distribution of Reasons for Leaving Employment and Training Programs

(Percentage distribution)

Reason	Percentage	
Layoff, fired	21	
Layoff		18
Discharge		2
Program ended	45	
Family, pregnancy	3	
Family		2
Pregnancy		1
Working conditions	7	
Better job		5
Pay was low		2
Illness, other voluntary	18	
Illness		1
Other voluntary (quit, school interfered, armed forces, moved)		17
Other	6	
Total percent	100	

Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978, except those in which participant is currently enrolled. (N=1,294,400)

Table 7.13 Reasons for Leaving Employment and Training Programs, by Selected Characteristics

(Percentage distributions)

Characteristics	Layoff, fired	Program ended	Family, pregnancy	Get a better job, low pay	Other voluntary	Other	Total percent
Sex							
Female	19	45	5	6	18	6	100
Male	22	45	1	7	18	6	100
Race							
Black	24	51	2	3	14	6	100
Hispanic	21	45	5	9	14	7	100
White	18	41	3	9	22	6	100
Age							
14-15	26	56	1	a	15	2	100
16-17	24	48	2	4	17	4	100
18-19	17	43	3	8	22	7	100
20-21	18	36	6	13	17	10	100
Enrollment status							
High school dropout	17	29	5	12	22	14	100
High school student	26	51	1	3	16	4	100
College student	16	54	0	9	18	4	100
Nonenrolled high school graduate	16	39	7	11	20	8	100
Poverty							
CETA disadvantaged	21	46	6	6	15	8	100
CETA not disadvantaged	21	44	4	8	19	4	100
CPS below poverty	20	47	6	6	14	8	100
CPS above poverty	21	47	3	5	20	4	100
Type of program							
Summer, not enrolled	20	48	1	9	12	8	100
Summer, enrolled	25	55	a	2	14	3	100
Year-round, not enrolled	25	32	7	12	24	11	100
Year-round, enrolled	21	46	2	7	20	4	100
Total	21	45	3	7	18	6	100

Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978, except those in which participant is currently enrolled. (N=1,924,400)

[a] Percentage is between 0.1 and 0.5.

also left school for those same family reasons (Hofferth and Moore, 1979). Year-round non-students were the least likely of any group to leave a program involuntarily, probably reflecting a lower proportion of participants in time-limited, project-type activities, as well as a greater commitment to the labor market.

Aspects of Program Most Liked and Disliked

Respondents were asked to name the one thing they most liked about each program, and the one thing they most disliked. Answers were coded into the categories shown in Table 7.14. If the categories of "job or training itself" and "the chance to learn" are combined, two-fifths of the respondents can be seen to value training experience as the most favorable aspect of the program. One-fifth of the respondents said that they liked the pay best.

Almost half of the participants said that there was nothing which they disliked about the program. This response does not mean that the programs were perceived as perfect; rather, it can be an indication that there was no one aspect which was an active problem for these youths. Training, pay, and staff and supervisors were the aspects most often mentioned as problems. The overall pattern shows that youths seem most concerned about the training they can get out of the program, with pay also important, but to a smaller proportion of participants. Social opportunities, that is, co-workers and other students, are

Table 7.14 Aspects of Program Most Liked and Disliked

(Percentage distributions)

Aspect of Program	Percent liking aspect most	Percent disliking aspect most
Job or training itself	28	13
Chance to learn[a]	13	-
Staff or supervisors	5	6
Co-workers	6	4
Pay	21	8
Something to do[a]	3	-
Everything	2	1
Nothing	5	45
Other	17	23
Total percent	100	100

Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978. (N=2,558,000)

[a] These positive aspects had no negative counterparts.

mentioned by relatively few as either favorite or least favorite aspects.

Tables 7.15 and 7.16 break down the most liked items by sex, race, and type of program.[19] Females were more likely than males to mention the job or the chance to learn as the most positive aspects of the program. Males were more likely than females to mention pay, and, surprisingly, more likely to mention-co-workers. Differences by ethnicity are small and unsystemmatic.

Table 7.16 shows several differences in the reports of preferred aspects of programs when broken down by program type. Year-round enrollees were more likely to mention the staff as positive aspects, while summer program participants were most likely to mention co-workers. Perhaps most significant is the relatively high proportion of those in year-round, out of school programs whose favorite aspect of the program was the chance to learn. This same group was least likely to mention pay.

Tables 7.17 to 7.19 show the aspects of the programs most disliked. It can be seen from Table 7.17 that one of the major differences by enrollment status is in the proportion of the sample indicating that they disliked nothing about the program. Half of the high school enrollees found nothing wrong in their programs, as compared with a third of the college enrollees. Out of school youths were intermediate. College enrollees may be in less satisfactory programs, or the more educated respondents may have a greater tendency to look at their situations critically,

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[19] Differences by enrollment status were quite small, and will not be presented.

Table 7.15 Aspect of Program Liked Most, by Sex and Race

(Percentage distributions)

Aspect liked most	Sex		Race			Percent of universe
	Female	Male	Black	Hispanic	White	
Percent of universe	48	52	35	11	54	
Job or training itself	29	26	31	30	25	28
Chance to learn	15	11	11	10	15	13
Staff, supervisors	5	4	3	6	6	5
Co-workers	6	7	4	8	6	6
Pay	17	24	21	15	22	21
Something to do	3	3	2	2	4	3
Everything	3	1	3	4	1	2
Nothing	4	6	6	6	4	5
Other	18	17	17	20	17	17
Total percent	100	100	100	100	100	100

UNIVERSE: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978. (N=2,558,000)

Table 7.16 Aspect of Program Liked Most, by Type of Program

(Percentage distributions)

Aspect liked most	Summer, not enrolled	Summer, enrolled	Year-round, not enrolled	Year-round, enrolled	Percent of universe
Percent of universe	6	28	34	31	100
Job or training itself	28	30	29	24	28
Chance to learn	6	9	17	13	13
Staff, supervisors	3	2	6	6	5
Co-workers	10	7	6	6	6
Pay	23	23	17	24	21
Something to do	6	4	2	3	3
Everything	a	3	1	3	2
Nothing	7	4	5	5	5
Other	17	18	17	17	17
Total percent	100	100	100	100	100

Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978. (N=2,558,000)

[a] Percentage is between 0.1 and 0.5.

Table 7.17 Aspect of Program Most Disliked, by Enrollment Status
(Percentage distributions)

Aspect disliked most	High school dropout	High school student	College student	Nonenrolled high school graduate	Percent of universe
Percent of universe	15	48	12	25	100
Job or training itself	11	14	16	10	13
Staff, supervisors	8	5	8	8	6
Co-workers	2	4	1	6	4
Pay	9	5	14	10	8
Everything	2	1	1	1	1
Nothing	42	49	33	43	45
Other	27	21	28	23	23
Total percent	100	100	100	100	100

Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978. (N=2,558,000)

Table 7.18 Aspect of Program Most Disliked, by Type of Program

Aspect disliked most	Summer, not enrolled	Summer, enrolled	Year-round not enrolled	Year-round enrolled	Percent of universe
Percent of universe	6	28	35	31	100
Job or training itself	14	14	9	16	13
Staff, supervisors	9	4	8	7	6
Co-workers	0	4	5	3	4
Pay	3	4	11	9	8
Everything	0	1	1	2	1
Nothing	7	50	42	43	45
Other	8	23	24	21	23
Total percent	100	100	100	100	100

Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978. (N=2,558,000)

Table 7.19 Aspect of Program Most Disliked, by Sex and Race
(Percentage distributions)

Aspect disliked most	Sex		Race			Universe
	Female	Male	Black	Hispanic	White	
Percent of universe	48	52	35	11	54	100
Job or training itself	12	14	14	10	13	13
Staff, supervisors	8	5	7	4	7	6
Co-workers	4	4	3	7	4	4
Pay	6	10	7	11	8	8
Everything	1	1	1	1	1	1
Nothing	45	45	46	44	44	45
Other	25	21	22	24	23	23
Total percent	100	100	100	100	100	100

Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978. (N=2,558,000)

with higher standards for satisfaction. College enrollees are overrepresented in all other categories except co-workers and staff or supervisors. Both high school and college students disliked the job or training itself relatively more frequently than either of the non-enrolled groups. These differences associated with enrollment status also show up in Table 7.18 which shows dislikes by types of programs.

Again, as with aspects of programs most liked, few differences appear by race or sex (Table 7.19). Males are somewhat more likely to complain about the pay or the training itself, while females are more likely to mention dissatisfaction with the staff or supervisors. Blacks and whites have similar patterns, while Hispanics are relatively more likely to mention co-workers and pay as problems and least likely to mention the training itself or supervisors.

Overall, then, participants tend to say that there was nothing they disliked about the programs. The most salient program features were the opportunity for training and the pay. Again, the major differences were functions of enrollment status and program type, probably reflecting differences in needs of participants as they enter the labor force.

Length of Time in Employment Programs

The length of time in each program was calculated using start and stop dates reported by participants. Programs which were completed successfully were not distinguished from those from which the participant dropped out or was expelled.[20] The distribution of the number of weeks spent in each program was highly skewed, with most programs lasting ten weeks or less.

Table 7.20 shows the average number of weeks spent in programs, broken down by the key demographic variables. Summer programs of course are shorter than the year-round programs, and year-round programs for students are shorter than those for the nonenrolled. The apparent age differences in weeks in training are no doubt functions of the proportion of youths in each age bracket who are in summer programs and who are enrolled in school.

Only small differences appear by sex and race. Hispanics on average are in programs for a longer period than are the other ethnic groups, and women tend to have longer programs than men.

IV. PARTICIPANT REACTIONS TO PROGRAM

Five measures of respondents' subjective assessments of their programs are available. Two are descriptive, asking about the difficulty of the work and the ease or toughness of the discipline of the program. The other three items ask for an assessment of the effectiveness of the program: satisfaction with the progam as a whole, an estimate of whether the program

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[20] Program completion is an important part of evaluating effects (Borus, 1978). At this point, however, the complexity of defining completion for subsidized job programs makes it impractical to explore this area. In many cases, subsidized jobs placements have no clearly defined end point comparable to the ending of a training class. A student who leaves class to take an unsubsidized job can be said to have left before the end of training. A work experience placement whose goal is to develop a satisfactory work history and who leaves for a similar unsubsidized job may have "completed" training, but this cannot be clearly ascertained from the available information.

Table 7.20 Mean Weeks Spent in Programs, by Selected Characteristics

Characteristic	Mean weeks
Sex	
Female	19.8
Male	16.4
Race	
Black	15.7
Hispanic	22.5
White	18.7
Age	
14-15	11.0
16-17	14.5
18-19	20.5
20-22	24.1
Region	
Northeast	17.1
North central	16.8
South	16.9
West	19.3
Enrollment status	
High school dropout	16.7
High school student	12.8
College student	20.8
Nonenrolled high school graduate	28.8
Type of program	
Summer, not enrolled	7.3
Summer, enrolled	7.5
Year-round, not enrolled	28.7
Year-round, enrolled	24.6

Universe: Enrollments of civilians age 14-21 on January 1, 1979, in government sponsored employment and training programs since January 1, 1978, except those in which participant is currently enrolled. (N=1,294,400) would make it easier to get a good job, and, for respondents who had been employed after leaving the program, whether the skills learned in the program had been useful on the job.[21]

As can be seen from Table 7.21, the vast majority of respondents report that their work was easy, or at least not too difficult, and that the discipline was easy, or at least not too tough. On the measures of perceived effectiveness, the programs seem to be doing fairly well. Only about one in eight programs was described as less than satisfactory. Over two thirds of the programs were rated as having improved paricipants' chances for getting a good job. A much smaller proportion of programs were rated as being directly helpful on a subsequent job. To some extent, the lower percentage of youths seeing their program as useful on the job as opposed to useful in getting a job may stem from the frequent focus of employment programs on income maintenance or the development of general skills and job-seeking techniques, which are not directly used after the job has been acquired. It may also reflect idealistic optimism by participants that, having spent their time and energy in the

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[21] Before describing the results, a few words about interpretation are in order. It it has been consistently found that people tend to report themselves as satisfied with their lives unless there is some active source of dissatisfaction. That is, satisfaction with a program actually measures the negative affect associated with participation (c. f., Andrews and McKennel, 1979). Analogously, it is unlikely that youths will report that a task is difficult unless they are actively experiencing problems in performance, or to say that discipline is tough unless they (or their co-workers) are having problems meeting the standards imposed. Humans are adaptable to their environment, which is one thing which makes the wide variety of settings in which people work possible.

Table 7.21 Weighted Distributions of Attitudes Toward Employment and Training Programs

1. How difficult or easy was the work you had to perform in this program?[a]

Score	Category	Percent
1.	Very difficult	3
2.	Fairly difficult	15
3.	Not too difficult	32
4.	Fairly easy	28
5.	Very easy	22

2. And how about the discipline in the program - was it:[a]

Score	Category	Percent
1.	Very tough	5
2.	Fairly tough	17
3.	Not too tough	33
4.	Fairly easy	23
5.	Very easy	21

3. Thinking back over your entire experience in this program, how satisfied or dissatisfied are you with it overall?[a]

Score	Category	Percent
1.	Very satisfied	41
2.	Somewhat satisfied	46
3.	Somewhat dissatisfied	8
4.	Very dissatisfied	5

4. How did the training you received in this program affect your chances of getting a good job--do you feel your chances of getting a good job were improved or not improved?[a]

Category	Percent
Improved	73
Not improved	27

5. After you left the program, did the training or experience you received help you or not help you in performing any job?[b]

Category	Percent
Helped	54
Not helped	46

[a] Universe: Enrollments of civilians age 14-21 who had participated in government employment and training programs since January 1, 1978. (N=2,558,000)

[b] Universe: Enrollments of civilians age 15-21 who had participated in government employment and training programs since January 1, 1978 and who had been employed after leaving the program. (N=1,085,300)

programs, justice requires that there be some kind of improvement in their employability. Rating usefulness on the job is less hypothetical, reflecting actual experience at work.

Discipline and Difficulty

The patterns of reported job difficulty and discipline by enrollment status show that those with more education, the college students and high school graduates, are more likely to report that the work was difficult (Table 7.22). They are also more likely than high school students to say that the discipline was tough, although still at a lower rate than high school dropouts. Summer programs, especially for non-student participants, were less often counted as difficult than were year-round programs. Few of the students in summer programs reported that discipline was tough.

Youths in poverty were more likely to mention tough discipline than were youths with incomes above the poverty level. The same trend is shown, though less sharply, for the CETA definition of economic disadvantage.

The implications of these patterns are intriguing. There is a suggestion that youths with more education may be seeking more challenging programs, and be willing to spend the effort needed in a relatively difficult and disciplined course of training in order to gain the skills needed for a successful work career. Programs for high school youths, particularly those in summer programs, should be more oriented toward income maintenance and general job holding skills, rather than specific training. It is expected that such programs demand less of participants.

Table 7.22 Perceptions of Employment and Training, by Selected Characteristics

Characteristic	Percent reporting work was difficult	Percent reporting discipline was tough
Total	18	22
Enrollment status		
High school dropout	18	30
High school student	16	19
College student	22	24
Nonenrolled high school graduate	28	24
Age		
14-15	15	15
16-17	16	22
18-19	20	24
20-21	19	25
Poverty		
CETA disadvantaged	16	23
CETA nondisadvantaged	19	21
CPS below poverty	15	25
CPS above poverty	19	20
Region		
Northeast	18	26
North central	18	23
South	14	18
West	20	28
Type of program		
Summer, not enrolled	8	25
Summer, enrolled	17	18
Year-round, not enrolled	20	26
Year-round, enrolled	18	22

Universe: Enrollments of civilians age 14-21 (see Table .30)

Alternatively, there may be a process of self-selection, whereby those high school graduates who do return to CETA for more training are those with the most difficulty with learning in general, so that they report their programs as more difficult. High school students would thus represent a wider range of ability within the programs than non-students. There is also a suggestion that the high school dropouts in particular experience difficulty with the discipline imposed by a regular job or course of training.

Table 7.23 shows interactions between gender and ethnicity in the perception of programs. There are essentially no differences in reported difficulty among females. Black young men and women report the same level of difficulty, but both white and Hispanic men are substantially more likely to report that their programs were difficult. Tough discipline was reported most frequently by Hispanics and by white males. Program difficulty is one of the few variables on which the largest sex difference is among whites. White females had the lowest frequency of reporting tough discipline.

Perceived Effectiveness

The ratings of satisfaction, improvement of chances for good employment, and usefulness of skills on the job all are subjective measures of the effectiveness of the programs. These subjective judgements are likely to overestimate the impact of the programs on the participants' actual employability, but the relationships between the participant characteristics and the ratings should be meaningful.

Table 7.23 Perceptions of Employment and Training Programs, Race-Sex Interactions

Race	Percent reporting work was difficult			Percent reporting discipline was tough		
	Female	Male	Total	Female	Male	Total
Black	13	13	13	21	20	20
Hispanic	12	22	17	27	28	28
White	16	25	21	17	28	23
Total	14	21	18	20	25	22

Universe: Enrollments of civilians age 14-21 on January 1, 1979 in government sponsored employment and training programs since January 1, 1978. (N=2,558,000)

The least effective programs, in terms of both improved job chances and job performance are the summer programs, particularly for the non-student participants (Table 7.24). By the same criteria, the year-round programs for students are the most effective, and are also most frequently reported as satisfactory. High school graduates are the most likely to report that their training had helped them on the job, but, along with dropouts, are somewhat less likely than students to report that their programs had improved their chances of getting a good job. Dropouts, in fact, have the most pessimistic assessment of their programs generally.

Multivariate Analysis More important than describing programs is exploring the factors which make programs more effective. While long-run measures of employment outcomes are not available, some preliminary assessments can be made using the subjective measures of effectiveness. In the next section, we explore the types of programs which were rated as more effective and the types of participants who reported better results, using multiple regression techniques.[22]

The model uses the estimates of area of residence, social

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[22] The ratings of improved job chances and of the usefulness of the training on the job are dichotomous, so that strictly speaking OLS techniques are inappropriate. However, since the distributions of the responses indicate a moderate probability of each choice (yes or no), the parameter estimates of multiple regression will be quite close to Probit estimates. Multiple regression provides well-established estimates of the significance of individual predictors and of the amount of variance accounted for by the total model which are not available for Probit or Logit.

Table 7.24 Perceived Satisfaction and Effectiveness of Government Employment and Training, by Selected Characteristics

Characteristic	Percent satisfied[a]	Percent believe job chances improved[a]	Percent of universe[a]	Percent believe helped job performance[b]	Percent of universe[b]
Type of program					
Summer, not enrolled	86	55	6	36	10
Summer, enrolled	90	70	28	48	23
Year-round, not enrolled	82	73	35	57	43
Year-round, enrolled	88	78	31	62	24
Enrollment status					
High school dropout	77	70	15	43	20
High school student	89	74	48	56	34
College student	92	75	12	51	14
High school graduate	86	71	25	60	32
Ethnicity					
Black	86	75	35	56	30
Hispanic	80	72	11	56	10
White	87	71	54	52	60
Sex					
Female	86	74	48	60	44
Male	87	71	52	49	56

[a] Universe: Enrollments of civilians age 14-21 who had participated in government employment and training programs since January 1, 1978. (N=2,558,000)

[b] Universe: Enrollments of civilians age 14-21 who had participated in government employment and training programs since January 1, 1978 and who had been employed after leaving the program. (N=1,085,300)

class, and family background introduced in the analysis of participation, plus a set of dummy variables summarizing the services delivered and the occupations for which youths were being trained. It is possible that, controlling for participant characteristics, training or work experience in areas with relatively concrete skill requirements, such as clerical and craft jobs, would be seen are more effective than would experience in other areas. Occupational area of training was constructed as a series of dummy variables, using the major divisions of professional and managerial, clerical and sales, skilled labor and crafts, and unskilled labor, all contrasted to service occupations. Since receipt of one type of service was more or less independent of receipt of any other type, each of the major categories was represented by a dichotomous variable, coded one if the service was reported and zero if it was not, for a crude check on whether particular types of training are, overall, seen as being more effective. Because of the small numbers in some of the cells, all supportive services were combined into a single category, as were all types of classroom training. Three other variables not used in the analysis of participation were included.[23] Enrollment status was included as before, plus a variable coded one if the program had been classified as a summer program and zero for a year-round program. This strategy incorporated the summer/enrollment typology of the program descriptions. The other two variables included were the estimates of the level of difficulty and the toughness of the discipline of the program. Finally, multiplicative interaction terms for sex by various predictors were entered. This model was estimated for the total sample, and separately by race. Interactions found to be insignificant for all models were dropped and the equations re-estimated.

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[23] Initial runs included a dichotomy indicating whether or not the respondent had been employed within six months of entering the program. It has been suggested that those who have been recently employed are less likely to need fundamental job skills and more interested in specific job skills than are those who have been out of the labor market for a long period (Schiller, 1976). Results were negative, and the variable was deleted.

The results are clearly affected by the available sample size, particularly for the perceptions of the usefulness of training for job performance, since the number of variables in the regressions is large and the total number of unweighted cases is less than 600.[24] The F-ratios for the regressions are very low for Hispanics and at best moderate for whites and blacks. (An alternative explanation would be that the model simply does not work as well for Hispanics.) Results must be considered suggestive, and some of the apparent differences by ethnicity may turn out to be simply due to instability of parameter estimates. However, some of the results dovetail with earlier patterns and are suggestive of future areas for investigation.

The results for satisfaction with the program (Table 7.25) show few substantial relationships, and no large departures from

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[24] The tables present the unweighted number of cases in each regression, which determines the degrees of freedom for significance testing. Because of the sampling design and the high rate of participation of blacks in government employment and training programs, the number of enrollments for blacks is actually higher than that for whites.

Table 7.25 Regression Results: Satisfaction with Programs Regressed on Participant and Program Characteristics

Variables	Total sample		Black		Hispanic		White	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Enrollment	.151	2.93**	.077	0.82	.017	0.14	.203	2.38
Diploma	.188	3.39**	.153	1.66	.233	1.80	.239	2.60
Independent	-.212	-3.92**	-.015	-0.17	-.305	-2.25*	-.313	-3.36
Parents education	-.015	-2.45**	-.013	-1.09	.011	0.95	-.032	-2.99
Ever married	.224	2.77**	.131	0.73	.374	2.12*	.229	1.78
Poverty	-.106	-2.55**	-.107	-1.57	.038	0.37	-.143	-2.04
Poverty NA	.106	1.08	-.059	-0.39	.227	0.98	.086	0.49
Region								
Northeast	-.065	-1.17	.109	1.15	.036	0.20	-.050	-0.52
South	.132	2.53**	.255	3.09**	.069	0.04	.108	1.23
West	-.095	-1.62	-.134	0.92	.281	0.21	-.194	-2.19
North central	-	-	-	-	-	-	-	-
Urban residence	-.016	-0.36	.066	0.80	.089	0.74	-.015	-0.20
Local unemployment rate	.185	2.53**	.222	1.42	.195	1.47	.194	1.63
Siblings	.009	1.31	.004	0.39	.016	0.88	.022	1.56
Family structure								
Mother only	.314	2.15*	.001	0.000	.721	2.27*	.582	2.15
Stepparent	.179	0.89	-.444	-1.07	.569	1.15	.362	1.17
Other	.187	0.97	.129	0.46	.045	0.10	.241	0.66
Intact	-	-	-	-	-	-	-	-
Race								
Black	-.075	-1.61	-	-	-	-	-	-
Hispanic	-.074	-1.09	-	-	-	-	-	-
White	-	-	-	-	-	-	-	-
Sex	-.004	-0.02	.138	.39	.761	1.64	-.181	-0.54
Age								
14-15	-.165	-0.76	.416	1.13	-1.248	-2.40**	-.168	-0.47
16-17	-.099	-0.56	.031	0.10	-.465	-1.07	.113	0.38
18-19	-.263	-1.57	-.029	-0.09	-.179	-0.42	-.249	-0.93
20-21	-	-	-	-	-	-	-	-
Program characteristics								
Summer program	-.120	-0.93	.275	1.32	.415	1.37	-.526	-2.42**
Occupational area								
Professional	-.309	-1.09	-.213	-0.47	-.098	-0.14	-.195	-0.39
Clerical	.186	+0.79	.372	1.02	-.142	-0.34	.495	1.16
Skilled labor	.254	1.10	.221	0.59	-.380	-0.60	.278	0.72

Table 7.25 (continued)

Variables	Total sample		Black		Hispanic		White	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Unskilled labor	.029	0.19	.114	0.46	1.076	2.37**	-.044	-0.18
Service	-	-	-	-	-	-	-	-
Program services								
Subsidized job	-.002	-0.01	-.208	-0.58	.237	0.46	-.132	-0.36
Classroom training	.042	0.31	-.140	-0.63	.680	2.17*	-.112	-0.50
Counseling	-.116	-0.94	.175	0.86	.040	0.14	-.403	-1.92
Job placement	.110	2.56**	.032	0.45	-.039	-0.37	.165	2.31**
Supportive service	-.072	-0.54	.064	0.28	-.005	-0.02	-.145	-0.64
Discipline	.024	1.27	.069	2.32*	.043	0.99	.003	0.09
Difficult	.022	1.09	-.038	-1.19	.041	0.94	.069	2.05**
Interactions:								
Sex by:								
Mother only	-.209	-2.26*	-	-	-.535	2.59*	-.358	-2.05*
Stepparent	-.118	-0.92	-	-	-.382	-0.98	-.155	-0.76
Other	-.124	-0.97	-	-	-.075	-0.27	-.155	-0.63
Summer program	.148	1.76	-.108	-0.82	-.098	-0.49	.379	2.64**
Professional	-	-	-	-	-.097	-0.23	-	-
Clerical	-	-	-	-	.016	0.06	-	-
Skilled labor	-	-	-	-	-1.204	-3.08**	-	-
Unskilled labor	-	-	-	-	.112	0.21	-	-
Subsidized job	.085	0.63	-	-	-	-	.157	0.68
Classroom training	.044	0.51	-	-	-	-	.150	1.07
Counseling	.183	2.30*	-	-	-	-	.336	2.50**
Job placement	.026	0.75	-	-	-	-	.065	1.08
Supportive service	.036	0.42	-	-	-	-	.064	0.42
Local unemployment	-.096	-2.10*	-.160	-1.64	-.112	-1.36	-.091	-1.20
Constant	1.78	6.82	1.43	4.22	.43	4.66	2.07	3.67
R^2 (adjusted)	0.099		0.046		0.110		0.167	
	3.76		1.54		1.67		2.92	
N (unweighted)	1312		560		272		480	

Universe: Enrollments of civilians age 14-21 who had participated in government employment and training programs since January 1, 1978.

*Significant at .05 level

**Significant at .01 level

the relationships shown in the cross-tabular tables. Minorities report lower levels of satisfaction than whites, as in the cross-tabulations, but in the context of the total model the differences are not significant.

For the total sample, indicators of life stage are related to satisfaction, although the directions are contradictory. Financially independent participants tend to be less satisfied, while marriage is positively related to satisfaction. The net effect indicates that financially independent singles have low satisfaction ratings of their programs.

When the results are broken out by race, some interesting patterns emerge. For whites, the results conformed fairly closely to those for the total group. The effects of region varied by race, with blacks living in the South reporting higher satisfaction, and whites in the West reporting lower satisfaction levels. The rural/urban distinction was not significant, but the effect of the local unemployment rate on satisfaction was significant and had a significant interaction with sex for the total sample. While young men reported higher levels of satisfaction the higher the local unemployment rate, there was no net effect at all for young women.

Family structure has no effect for blacks, but for Hispanics and whites there is an interaction effect between sex and living with only the mother at age 14. Compared with youth from intact homes, young women from mother-headed households were more satisfied with their programs, while young men were less satisfied. None of the other family structure variables are significant.

Program characteristics as measured tended to have small and rather inconsistent effects for program satisfaction. White males were more satisfied if they were in summer than in year round programs, while for the white females the relationship was reversed. For Hispanics, both young men and young women were more satisfied with skilled labor than with service occupations, but the effect was more pronounced for the young women.

As shown in Table 7.26, the model worked somewhat better for the total sample in predicting perceived improvement in job opportunities than it did for satisfaction. The regression as a whole was not significant for Hispanics, so their results will not be interpreted. There are some interesting differences by race. As usual, measures of socio-economic background were much more closely related to the outcome variable for whites than for the other groups, and least closely related for blacks. Family structure has little effect. For the total sample, there is an interaction effect for living in a female-headed household at age 14. Compared to their counterparts from intact homes, young men are more likely to feel that their job chances were improved, while young women are less likely to have such an impression.

There appear to be some differences by geographic area. For all race groups, those living in the North East were more pessimistic about their job chances than were those living in the North Central area. Whites residing in the Western part of the country or outside the metropolitan areas are also less likely to

Table 7.26 Regression Results: Perceived Improvement in Chances of Getting a Good Job, Regressed on Participant and Program Characteristics

	Total sample		Black		Hispanic		White	
Variables	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Enrollment	.107	3.28*	.136	2.40**	-.063	-0.75	.121	2.24**
Diploma	-.035	-0.99	-.079	-1.40	.102	1.16	-.004	-0.06
Independent	-.039	-1.14	-.051	-0.92	.013	0.14	-.031	-0.53
Parents education	-.008	-2.05*	-.001	0.12	.013	1.71	-.021	-3.05**
Ever married	.111	2.16*	-.142	-1.28	.105	0.87	.135	1.66
Poverty	-.013	-0.50	.029	0.69	-.050	-0.72	-.052	-1.18
Poverty NA	.008	0.13	-.033	-0.36	-.186	-1.18	.059	0.53
Region								
Northeast	-.107	-3.03*	-.046	-0.79	-	-	-.206	-3.39**
South	.097	2.93*	.119	2.36*	-	-	.059	1.06
West	-.054	-1.46	-.049	-0.54	-	-	-.117	-2.09*
North central	-	-	-	-	-	-	-	-
Urban residence	.074	2.56*	.065	1.27	-.095	-1.15	.163	3.48**
Local unemployment rate	.158	3.40**	.042	0.44	.022	0.24	.326	4.35**
Siblings	-.001	-0.24	-.008	-1.26	.012	0.99	.006	0.67
Family structure								
Mother only	.189	2.04*	.135	1.01	.250	1.15	.258	1.51
Stepparent	.059	0.46	-.095	-0.37	-.019	-0.05	.114	0.58
Other	-.104	-0.85	-.074	-0.43	-.030	-0.10	-.406	-1.77
Intact	-	-	-	-	-	-	-	-
Race								
Black	-0.11	-0.38	-	-	-	-	-	-
Hispanic	-.042	-0.38	-	-	-	-	-	-
White	-	-	-	-	-	-	-	-
Sex	-.024	-0.19	.056	0.26	-.235	-0.74	-.079	-0.37
Age								
14-15	-.037	-0.27	.002	.01	.174	0.49	-.180	-0.79
16-17	.106	0.94	.068	0.36	.056	0.19	.009	0.05
18-19	.075	0.70	.027	0.14	.082	0.28	-.080	-0.48
20-21	-	-	-	-	-	-	-	-
Program characteristics								
Summer program	-.035	-0.43	-.127	-1.00	.170	0.82	-.008	-0.06
Occupational area								
Professional	-	-	.556	2.02*	.076	.16	-.440	-1.41
Clerical	-.080	-.54	.200	0.90	.209	.73	-.238	-0.88
Skilled labor	.005	.032	.272	1.21	.300	.69	-.031	-0.13

Table 7.26 (continued)

Variables	Total sample		Black		Hispanic		White	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Unskilled labor	.124	1.30	.398	2.64**	.232	.75	-.042	-0.27
Service	-	-	-	-	-	-	-	-
Program services								
Subsidized job	-.399	-2.91**	.024	0.11	-.566	-1.62	.831	3.61**
Classroom training	.176	2.04*	.194	1.41	.080	0.37	.140	0.99
Counseling	.103	1.32	-.042	-0.33	-.069	-0.37	.248	1.86
Job placement	.083	3.05*	.088	2.02*	.184	2.60**	.067	1.48
Supportive service	.022	0.26	.016	0.12	.116	0.55	.023	0.16
Discipline	-.030	-2.52**	-.018	-1.01	-.008	-0.28	-.039	-1.91
Difficult	-.002	-0.17	-.031	-1.56	.048	1.61	.003	0.13
Interactions:								
Sex by:								
Mother only	-.124	-2.18*	-	-	-	-	-	-
Stepparent	.012	0.15	-	-	-	-	-	-
Other	.071	0.88	-	-	-	-	-	-
Summer program	-.020	-0.37	.056	0.70	-.119	-0.87	-.054	-0.59
Professional	-	-	-.306	-1.53	-	-	-	-
Clerical	-	-	-.025	-0.20	-	-	-	-
Skilled labor	-	-	-.332	-3.12**	-	-	-	-
Unskilled labor	-	-	-.101	-0.59	-	-	-	-
Subsidized job	.268	3.17**	-	-	-	-	.569	3.90**
Classroom training	-.028	-0.52	-	-	-	-	.026	0.29
Counseling	-.024	-0.04	-	-	-	-	-.161	-1.89
Job placement	.056	2.55**	-	-	-	-	.117	3.08**
Supportive service	.022	0.40	-	-	-	-	.018	0.18
Local unemployment rate	-.078	-2.67*	-.006	-0.10	-.007	-0.12	.179	-3.73**
Constant	1.566	7.57	1.427	3.82	1.617	3.09	1.77	5.30
R^2 (adjusted)	0.154		0.123		0.038		0.246	
F	5.59		2.56		1.21		4.12	
N (unweighted)	1312		560		272		480	

Universe: Enrollments of civilians age 14-21 who had participated in government employment and training programs since January 1, 1978.

*Significant at .05 level.

**Significant at .01 level.

report improved job chances, other things equal. For whites, a significant sex difference appears in the relationship between the perceived effectiveness of the program and the local unemployment rate. The net effect is positive for young men, and near zero for young women. That is, young white men in areas where jobs are scarce are more likely to feel that their chances of getting a good job have improved due to participation in an employment program than those in an area with better employment prospects.

In contrast to the scant differences by participant characteristics, perceived opportunity was systematically related to program descriptors. Effects are significant only for blacks. Training in skilled labor occupations is negatively related to perceived improvement for blacks, when the interaction term with sex is taken into account. Compared to those whose training is in service occupations, young black men are slightly less likely to feel that their chances for a good job have improved, while young black women are much less likely to have this perception. Although the interaction term is not at conventional levels of significance, the net effect of training in professional and technical occupations for young blacks shows a somewhat similar pattern. The reasons for these shifts are not clear at this time, but may represent differences in the respondents' views of the labor market outside of subsidized employment, and of the quality of the training received in government sponsored programs relative to other possible sources of training.

Not surprisingly, of all types of services measured, placement on an unsubsidized job is most consistently related to perceived chances of getting a good job. The effect is most pronounced for young white women. Classroom training was also positively related to perceived opportunity for the total sample. Placement on a subsidized job, the most common of the services, was negatively related to perceived improvement of job opportunities for young white males, but quite positively viewed by white females. The pattern suggests that, among whites at least, young women may view their chances of getting employment unaided by the program more pessimistically than do young men.

The reports of the usefulness of training on a subsequent job must be interpreted very cautiously because of the relatively small numbers of participants included in this universe. While acknowledging that this is a complex model to be estimating on small subgroups, some tentative conclusions may be drawn. The coefficients of the measures of social status and family background tend to be small and insignificant. The coefficient for school enrollment, on the other hand, was significantly positive, especially among whites. Those in the North East region tend to be less likely than those in other regions to report that their program was useful to them (Table 7.27).

For the total group, most of the services had a positive net effect on perceived helpfulness, particularly job placement. The results for the separate ethnic groups suggest some important interactions. For blacks, placement into an unsubsidized job was the only service substantially related to the usefulness of the

Table 7.27 Regression Results: Perception that Skills Learned in Training Were Useful on Subsequent Job, Regressed on Participant and Program Characteristics

Variables	Total sample		Black		White	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Enrollment	.145	2.78**	.149	1.37	.171	1.95*
Diploma	.051	0.93	-.088	-0.81	.085	0.98
Independent	-.025	-0.45	-.169	-1.62	.018	0.18
Parents education	-.004	-0.67	.010	0.72	-.021	-1.88
Ever married	.073	0.82	-.054	-0.25	-.057	-0.40
Poverty	-.124	-2.77**	-.123	-1.35	-.169	-2.26*
Poverty NA	-.307	-2.69**	-.311	-1.97*	-.49	-1.95*
Region						
Northeast	-.151	-2.43**	-.056	-0.46	-.286	-2.59**
South	.075	1.30	.064	0.64	.064	0.68
West	-.028	-0.46	.346	1.75	-.085	-0.92
North Central	-	-	-	-	-	-
Urban residence	.492	0.98	-.056	-0.55	.127	1.60
Local unemployment rate	.070	0.87	-.299	-1.64	.217	1.63
Siblings	.002	0.27	-.0005	-0.03	.014	0.82
Family structure						
Mother only	-.169	-1.04	-.150	-0.54	-.217	-0.78
Stepparent	-.187	-0.89	-.156	-0.31	-.110	-0.34
Other	-.291	-1.26	-.068	-0.17	-.757	-1.66
Intact	-	-	-	-	-	-
Race						
Black	.042	0.79	-	-	-	-
Hispanic	.020	0.27	-	-	-	-
White	-	-	-	-	-	-
Sex	-.305	-1.43	-.657	-1.60	-.108	-.29
Age						
14-15	.009	0.03	-.716	-1.09	.513	0.97
16-17	-.217	-1.16	-.317	-0.87	-.432	-1.39
18-19	-.297	-1.81	-.159	-0.42	-.374	-1.44
20-21	-	-	-	-	-	-
Program characteristics						
Summer program	-.268	-1.92*	-.320	-1.24	-.165	-0.73
Occupational area						
Professional	-.396	-1.36	-.158	-0.23	-.268	-0.59
Clerical	-.235	-0.96	-.515	-1.27	.093	0.22
Skilled labor	-.381	-1.51	-.679	-1.55	-.549	-1.33
Unskilled labor	-.095	-.56	.096	0.29	-.172	-0.66
Service	-	-	-	-	-	-
Program services						
Subsidized job	.277	1.32	.040	0.09	.331	0.99
Classroom training	-.022	-0.15	.034	0.12	-.116	-0.51
Counseling	.224	1.67	.141	0.54	.456	2.03*
Job placement	.192	3.98**	.318	3.56	.156	1.98*
Supportive service	.048	0.33	.083	0.28	.370	1.41
Discipline	.016	0.82	.014	0.39	.0072	0.21
Difficult	-.004	.21	-.047	-1.19	-.204	-0.58

Table 7.27 (continued)

Variables	Total sample		Black		White	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Interactions:						
Sex by:						
Mother only	.041	0.38	.025	0.14	.070	0.37
Stepparent	.075	0.55	.073	0.24	-.011	-0.05
Other	.104	0.65	-.082	-0.33	.515	1.47
Summer program	.106	1.16	.182	1.14	.004	0.03
Professional	.116	0.56	.044	0.08	-.126	-0.38
Clerical	.224	1.63	.362	1.60	.020	0.09
Skilled labor	.009	0.07	-.188	-0.76	.037	0.18
Subsidized job	-.068	-0.49	-.095	-0.35	-.036	-0.15
Classroom training	.149	1.60	.043	0.25	.304	1.98*
Counseling	-.092	-1.02	-.0012	0.01	-.318	-1.96*
Job placement	.088	2.25**	.026	0.39	.176	2.48**
Supportive service	.039	0.40	.016	0.09	-.244	-1.32
Local unemployment	-.001	-.024	.174	1.38	-.067	-0.78
Constant	1.35	4.09	2.62	3.82	1.11	2.09
R^2 (adjusted)	.207		.14		.29	
F	3.69		1.66		2.85	
N (unweighted)	537		206		224	

Universe: Enrollments of civilians age 14-21 who had participated in government employment and training programs since January 1, 1978 and who had been employed after leaving the program.

*Significant at .05 level.
**Significant at .01 level.

program on the job. For whites, there seem to be major differences among males and females in the reactions to programs. The net coefficient of counseling was negative for young men and positive for young women: that is, compared with their counterparts who did not report receiving job counseling, young men were less likely and young women were more likely to report that their program experiences were useful on a subsequent job. Classroom training and placement into an unsubsidized job were associated with greater frequency of reported usefulness for both sexes, with stronger effects for young women.

Contrary to expectations, employment programs involving unskilled labor tended to be associated with reported usefulness. The interaction term is significant for whites, approaches significance for blacks, and indicates that the effect is stronger for young women than for young men, another apparent paradox. The only apparent reason for this pattern is that these programs provide general job holding skills, as opposed to specific occupational skills. If the subsequent job is in a different occupational area, the specific skills acquired in the employment program would be wasted, but the general ones (getting to work on time, dealing with supervisors) still apply. In this light, it could be argued that the "higher" the skills, the more difficult they were to acquire, the less useful the program would seem for later jobs.

V. SUMMARY

The NLS provides a unique opportunity to describe programs as they are experienced by participants, rather than as they appear from the viewpoint of the service delivery agencies. CETA and WIN are targeted at the structurally unemployed, those with the most serious barriers to employment, and the characteristics of participants reflect this priority. The pervasiveness of CETA programs is shown in the fact that, by the time they leave adolescence, a full 42 percent of the black population has participated in some sort of government program.

The distinction between structural and income maintenance goals discussed in the introduction to the description of programs can be seen in the distributions reported here. Ethnicity, particularly the distinction between blacks and whites, is a major patterning variable. Blacks are most likely to participate in programs. Minorities, especially blacks, receive basic educational services from government programs, implying that the programs serve to complement the school systems for minorities. Ethnicity is a much stronger correlate of virtually all of the characteristics of the programs reported here than is income, defined either as CETA economically disadvantaged or as CPS poverty. Essentially, income differentiates among whites, not among blacks.

The set of characteristics which indicate roughly the life cycle stage of young people again indicate the difference in goals of different programs. High school youths, most likely to participate in summer programs and year-round subsidized employment programs, tend to stress the income benefits of program participation. Enrolled youths are less likely to get classroom training, appropriately, since the regular school program should be providing these classes to their students. Despite the image of adolescents as primarily peer-oriented, the reports of the aspects of programs which were most liked and disliked keyed on either income or training.

Occupational segregation by gender continues, perhaps because young women who enter the programs feel more comfortable getting training in clerical and other typically female occupations.

The subjective responses of youths indicate that, by and large, they feel that they are being helped by the services they receive. They are more likely to believe that their experiences will help them in getting a job than they are to say that they are using the skills acquired in the program on the job, but both sorts of outcomes are important, if they can be borne out by actual employment experiences. Young women are more likely to see the experiences during training as helping them later on. General job skills may be more important to later experiences than specific, less easily transferred ones.

Government employment programs appear to be one mechanism for approaching the problem of unemployment among minorities and the economically disadvantaged.

Table 7A.1 Participants in Multiple Government Employment and Training Programs, by Selected Characteristics

(Percentage distributions)

Characteristics	Percent of universe	Number of programs 1	2	3-5	Total percent
Sex					
Female	48	72	21	7	100
Male	52	75	18	7	100
Race					
Black	35	73	21	6	100
Hispanic	11	76	19	5	100
White	54	74	19	8	100
Enrollment status					
High school dropout	16	73	20	7	100
High school student	48	76	20	4	100
College student	12	80	17	4	100
Nonenrolled high school graduate	25	65	20	15	100
Region					
Northeast	21	72	23	5	100
North central	30	70	19	11	100
South	31	76	19	5	100
West	19	83	15	2	100
Poverty					
CETA: disadvantaged	46	72	21	7	100
CETA: not disadvantaged	54	75	18	6	100
OMB: below poverty	34	72	21	7	100
OMB: above poverty	66	75	18	6	100
Total		75	19	6	100

Universe: Civilians age 14-22 on January 1, 1979, who participated in government employment and training programs since January 1, 1978. (N=1,829,200)

Table 7A.2 Proportion of Participants Receiving Various Services, by Enrollment Status

Services provided	High school dropout	High school student	College student	Nonenrolled high school graduate	Total
Job counseling	49	44	37	49	45
Basic education	20	13	6	16	14
English language	2	2	0	1	2
GED	27	7	3	7	
College preparatory	10	14	18	10	13
Skills training	26	19	22	30	23
Non-CETA job placement	12	6	8	19	
Medical	19	11	11	18	14
Child care	6	4	4	2	4
Transportation	21	16	9	7	22
Total	13	54	11	22	100

Universe: Enrollment of civilians age 14-21 on January 1, 1979, in government subsidized jobs since January 1, 1978. (N=2,268,000)

Table 7A.3 Proportion of Programs Providing Various Services, by Types of Program

Services provided	Summer, not enrolled	Summer, enrolled	Year-round not enrolled	Year-round, enrolled	Total
Job counseling	50	39	49	46	45
Basic education	9	12	19	12	14
English language	1	2	1	2	2
GED	11	6	15	7	9
College preparatory	5	13	11	17	13
Skills training	10	18	32	22	23
Non-CETA job placement	6	4	19	8	10
Medical	8	10	20	12	14
Child care	2	5	4	3	4
Transportation	9	18	13	12	14
Total	7	31	29	34	100

Universe: Enrollment of civilians age 14-21 on January 1, 1979, in government subsidized jobs since January 1, 1978. (N=2,268,000)

Chapter 7 Glossary

AFDC
Aid to Families with Dependent Children.

AGE
Age of respondent at time of interview
Categories are as follows:
(1) 14-15 years
(2) 16-17 years
(3) 18-19 years
(4) 20-21 years

CETA
The Comprehensive Employment Training Act. CETA funded agencies provide a variety of employability services.

CLASSROOM TRAINING
See "program services."

CLERICAL
See "occupational area."

COUNSELING
See "program services."

CPS
Current Population Survey.

DIFFICULT
A categorized variable representing the perceived difficulty of the program.
Categories include:
(1) very difficult
(2) fairly difficult
(3) not too difficult
(4) fairly easy
(5) very easy

DIPLOMA
A variable that determines whether the respondent has received a diploma or passed a high school equivalency (GED) test.
(1) Respondent has diploma or passed equivalency test
(0) Otherwise

DISCIPLINE
A categorized variable representing the respondent's perception of the discipline in the program.
The categories include:
(1) very tough
(2) fairly tough
(3) not too tough

(4) fairly easy
(5) very easy

ECONOMIC DISADVANTAGED

A binary variable that is coded 1 if the respondent lives in a household in which income is below the CETA definition of poverty and zero otherwise.

EMPLOYMENT PRIOR TO ENROLLMENT

A binary variable coded 1 if the respondent had a job six months prior to enrollment in a government training program.

ENROLLMENT STATUS

Enrollment status as of May 1, 1979 included college enrollment.

Categories include:
(1) high school dropout
(2) high school student
(3) college student
(4) nonenrolled high school graduate

EVER MARRIED

A variable that represents the Respondent's marital status.
(1) Respondent is married, spouse present, or widowed, divorced, separated.
(2) never married

FAMILY INTACTNESS

A set of varaibles representing the household composition when respondent was 14 years old.

MOTHER ONLY

A binary variable coded 1 if the household was headed by a single parent and zero otherwise.

STEPPARENTS

A binary variable coded 1 if the household included a stepmother or stepfather and zero otherwise.

OTHER FAMILY

A binary variable coded 1 if the household composition consisted of anything other than real parents, single parents, or stepparents and zero otherwise.

INDEPENDENCE

A binary variable that is coded 1 if the respondent was financially self-supportive during the year prior to the interview date and zero otherwise.

JOB PLACEMENT

See "program services."

MOTHER ONLY

See "family intactness."

NORTHEAST

See "region."

NUMBER OF PROGRAMS EVER

The number of government sponsored training programs that respondent participated in.

(1) none
(2) one
(3) more than one

NUMBER OF SIBLINGS

A continuous variable representing the actual number of brothers and sisters the respondent has.

OCCUPATIONAL AREA

Occupational area of job that respondent was being training for. Occupational areas included:

PROFESSIONAL

A binary variable coded 1 if the job was professional or managerial and zero otherwise.

SKILLED LABOR

A binary variable coded 1 if the job was crafts, operatives or transportation operatives and zero otherwise.

UNSKILLED LABOR

A binary variable coded 1 if the job was for unskilled workers and zero otherwise.

CLERICAL

A binary variable coded 1 if the job was clerical or sales and zero otherwise.

SERVICE

A binary variable coded 1 if the job was service-oriented and zero otherwise.

OMB

Office of Management and Budget.

OTHER FAMILY

See "family intactness."

PARENT'S EDUCATION

A continuous variable representing the educational attainment of the parent with the highest grade completed. For respondents with no value on this variable, the mean educational attainment value of fathers within each race group (Hispanic, Black, White) was used as the education value for the respective respondent.

PROFESSIONAL

See "occupational area."

PROGRAM SERVICES

Kinds of services and other types of training provided for the respondent by various programs. The respondent could have had multiple services from one training program. Services include:

SUBSIDIZED JOB

A binary variable coded 1 if the respondent was placed on a government subsidized job after completion of the training program and zero otherwise.

CLASSROOM TRAINING

A binary variable coded 1 if the training program provided classroom training in reading, writing or arithmetic and zero otherwise.

COUNSELING

A binary varaible coded 1 if the program provided job counseling and zero otherwise.

JOB PLACEMENT

A binary variable coded 1 if the program placed the respondent on a job outside the program and zero otherwise.

SUPPORTIVE SERVICES

A binary variable coded 1 if the program provided college preparatory services, health care or medical services, childcare, or transportation and zero otherwise.

REGION

This variable was broken down into three categories which represent the respondent's place of residence as of the interview date.

Northeast:	(1)	Respondent lives in the Northeast
	(0)	otherwise
South:	(1)	Respondent lives in the South
	(0)	otherwise
West:	(1)	Respondent lives in the West
	(0)	otherwise

SERVICE

See "occupational area."

SEX

Respondent's sex. Female is the referent category in the regressions.

SKILLED LABOR

See "occupational area."

SMSA

A binary variable coded 1 if the respondent resided in the Standard Metropolitan Statistical Area (SMSA) and zero otherwise.

SOUTH

See "region."

SSI

Supplemental Security Income. SSI provides transfer payments to the aged, blind, and disabled who qualify on teh basis of financial need.

STEPPARENTS

See "family intactness."

SUBSIDIZED JOB

See "program services."

SUMMER

A binary variable coded 1 if the respondent participated in a summer only government sponsored training program and zero otherwise.

SUMMER, ENROLLED

See "type of program."

SUMMER, NOT ENROLLED

See "type of program."

SUPPORTIVE SERVICES

See "program services."

TYPE OF PROGRAM

A variable characterizing the type of government sponsroed training program and whether the respondent was enrolled in school or not.

SUMMER, NOT ENROLLED

Respondent is participating in a summer training program and is not enrolled in school.

SUMMER, ENROLLED

Respondent is participating in a summer training program and is currently enrolled in school.

YEAR-ROUND, NOT ENROLLED

Respondent is participating in a year-round training program and is not enrolled in school.

YEAR-ROUND, ENROLLED

Respondent is participating in a year-round training program and is currently enrolled.

UNSKILLED LABOR
See "occupational area."

WEST
See "region."

YEAR-ROUND, ENROLLED
See "type of program."

YEAR-ROUND, NOT ENROLLED
See "type of program."

YEDPA
The Youth Employment and Demonstration Projects Act. Passed in 1977 and largely incorporated into the CETA amendment bill of 1978, this law mandated various types of youth employment programs.

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CHAPTER 8

AN OVERVIEW OF THE POST SCHOOL VOCATIONAL TRAINING EXPERIENCES OF YOUTH

by Tom Pollard

I. INTRODUCTION

One of the most important facets of a young person's life is preparation for participation in the labor market. Other chapters of this volume have dealt with preparatory programs related to regular schooling and government sponsored civilian training. This chapter covers training received in other settings--classes at vocational education institutions both public and private, such as vocational and technical schools, business colleges, barber colleges, etc., as well as on-the-job company training and apprenticeship programs. For purposes of discussion this rather heterogeneous group of programs will be referred to as vocational training. Only post school vocational training for youth 16-22 at the survey date will be considered.[1]

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[1] An examination of questionnaire responses showed that vocational education classes taken as a part of school were being reported as vocational training. The intent of this section of the NLS questionnaire was to examine vocational training taken apart from school. The in-school training experience was recorded in another section of the questionnaire and is analysed in Chapter 6 of this report; government-sponsored training is described in Chapter 7. For purposes of this chapter the universe of respondents and training courses was reduced by 1) considering only respondents in the 16 - 22 age group who were no longer in school at the time of the survey and 2) considering only classes completed after the respondent left school. The availability of information on the month and year in which training participated in since January 1, 1978 was finished allowed comparison with the month and year that the respondent left school. For vocational training finished prior to January 1, 1978 only the year of completion was recorded. Therefore, only classes which were completed in the years after leaving school were allowed. These restrictions resulted in rejection of 30 percent of the trainees

II. PARTICIPATION IN VOCATIONAL TRAINING

The estimated training participation rate (TPR) among all out-of-high-school youth age 16 - 22 was 12 percent. Approximately 1,950,000 of the 16,598,000 youth in this age group had participated for one month or more in vocational training since leaving high school (Table 8.1).[2]

The training participation rate was positively correlated with age since older youth had had more time to invest in training. The TPRs ranged from 3 percent for 16 and 17 year olds to 20 percent for those 22 years of age.

Across the entire sample males and females participated equally in training, the TPR for both groups being 12 percent. Among some subgroups, however, male and female participation varied. Black and Hispanic females participated to a greater extent than their male counterparts; for whites the opposite was the case. Female high school dropouts were less likely than male dropouts to have participated in training,[3] but males and females with at least 12 years of education had equal participation rates.

Blacks and Hispanics enrolled equally in vocational training, but less than whites--8 percent as opposed to 13

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and 40 percent of the training responses originally recorded.

[2] This estimate is conservative. As explained in Footnote 1, it excludes training taken prior to January 1, 1978 which was finished after the respondent left high school but within the same calendar year.

[3] The relatively low rate for female dropouts is explained in part by the greater likelihood that females will leave high school because of pregnancy or marriage. See Chapter 8 of this report.

percent. Females showed narrower race differentials in TPR than males. The relative racial equality among females parallels that evident in wage rate and employment patterns.[4]

TPRs computed by geographical region and SMSA/non-SMSA residence add new dimension to the race and sex differences. The lowest regional TPR was in the South, 10 percent. This rate primarily reflects the low rate among whites (due to their preponderence in the sample), but blacks and Hispanics also exhibited relatively low rates in that region. The highest regional TPR was in the North Central region, where whites had their highest TPR. Blacks and Hispanics had relatively low rates in the North Central region, causing the margin between whites and minorities to be greatest there. The only substantial difference in TPR by SMSA/non-SMSA occurred for blacks: those living in SMSAs were much more likely than other blacks to have participated in training.

The relationship between TPR and educational enrollment status indicates that youth who drop out of high school have a TPR less than one-third that of nonenrolled high school graduates. Further, blacks and Hispanics, who are more likely to have left high school, are less likely than white dropouts to have participated in training. Private vocational training is thus less compensatory for the disadvantaged labor market entrant than is government sponsored vocational training.

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[4] See Chapters 3 and 4 of this report.

Table 8.1 Participation in Post High School Vocational Training, by Selected Characteristics

Characteristic	Female		Male		Total	
	Total number (thousands)	Training participation rate	Total number (thousands)	Training participation rate	Total number (thousands)	Training participation rate
Age						
16	136	1	176	4	312	3
17	356	3	240	2	596	3
18	1471	7	1238	6	2709	6
19	2105	8	1875	11	3980	10
20	1985	14	1983	12	3968	13
21	2137	15	1904	17	4041	16
22	458	22	535	18	993	20
Race						
Black	1140	10	970	6	2109	8
Hispanic	552	9	475	8	1027	8
White	6955	12	6507	13	13462	13
Educational attainment						
0-8 years	394	1	454	5	849	3
9-11 years	1310	4	1414	7	2725	5
12 years	4513	15	3893	15	8405	15
13+ years	2404	11	2158	11	4562	11
Enrollment status						
High school dropout	1710	3	1871	6	3581	5
College student	2475	7	2594	8	5169	7
Nonenrolled high school graduate	4337	18	3457	18	7802	18
Total	8647	12	7951	12	16598	12

UNIVERSE: Civilian youth age 16-22 who were not enrolled in high school at time of training or on the survey date.

III. OCCUPATIONS FOR WHICH TRAINING WAS TAKEN

Respondents enrolled in training for one month or more were asked to state for each program taken (up to a maximum of 6) what job they were being trained for.[5] In this analysis of the types of training, the responses rather than the respondents serve as the universe. Such an approach treats as equal multiple courses taken by the same person and single courses taken by different people.

Seventy-nine percent of the trainee responses were concentrated in four broad occupational categories: professional, technical, and kindred (22 percent), clerical (21 percent), crafts (22 percent), and services--except private household (14 percent). (Table 8.2 presents the distributions by race and sex of the occupations for which training was taken.) Two of the remaining categories accounted for half of the remaining 20 percent, operatives--except transport (6 percent) and managers and administrators (4 percent).

The differentiations by sex indicate that segregation in vocational training is as complete as it is in employment.[6] With the exception of two occupational categories, managers and administrators and professional and technical--which were fairly evenly distributed, with females having slightly higher rates of participation--the major occupational categories were represented overwhelmingly by one sex. Training in clerical and service

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[5] The 1,950,000 persons who participated in training yielded 2,185,000 training responses, or 1.12 courses per person.

[6] See Chapter 7 of this report.

Table 8.2 Occupations for Which Post High School Vocational Training Was Taken, by Race and Sex

(Percentage distributions)

Occupations	Female				Male				
	Black	Hispanic	White	Total	Black	Hispanic	White	Total	Total
Professional, technical and kindred	25	12	23	23	27	17	20	21	22
Managers and administrators, except farm	3	2	4	4	3	2	5	5	4
Sales	0	2	5	40	0	0	1	1	3
Clerical and kindred	37	37	37	37	0	6	5	5	21
Crafts	2	2	2	2	42	32	42	42	22
Operatives, except transportation	1	0	1	1	4	11	13	12	6
Transport equipment operatives	0	0	0	0	6	0	1	2	1
Laborers, except farm	0	0	1	1	0	0	2	2	1
Farm laborers	0	0	<1	<1	0	0	0	0	<1
Farmers and farm managers	0	0	0	0	0	0	<1	<1	<1
Services, except private household	22	35	25	25	1	14	4	4	14
Private household workers	0	0	0	0	0	0	0	0	0
Occupation not reported	10	11	3	4	18	18	5	7	6
Total percent	100	100	100	100	100	100	100	100	100
Total number (thousands)	130	55	909	1094	89	44	957	1091	2185

UNIVERSE: Civilian youth age 16-22 who were not enrolled in high school at time of training or on the survey date and who participated in training for at least one month.

occupations made up 62 percent of the responses of females but only 9 percent of the male responses. On the other hand, while 54 percent of the male training responses were in either the crafts or operative occupations, only 2 percent of the female responses were in these categories. The question of whether the segregation exists because of choice, social stigma, or discrimination by guidance counselors and/or training administrators warrants careful study.

The occupational distributions for the racial groups were much more similar. It is not possible to characterize any occupational training as being taken primarily by one group. Some variation is apparent, however, in the degree of representation by each racial group within certain occupational categories. For example, a relatively heavy representation of Hispanics of both sexes appears in training for the service and clerical occupations. Blacks were overrepresented in professional and technical training. Whites and blacks were more heavily represented than Hispanics in crafts training. Among females, Hispanics were the least represented in professional and technical, managerial and administrative, and operative training. Among both males and females, Hispanics were more concentrated than blacks or whites in training for the occupations with the lowest pay, lowest status, and least opportunity for skill training.

Of interest also is the relationship between educational attainment and occupation for which training was taken, shown in Table 8.3. Those with 13 or more years of schooling were more

Table 8.3 Occupations for Which Post High School Vocational Training Was Taken, by Educational Attainment

(Percentage distributions)

Occupations	0-8 years	9-11 years	12 years	13+ years	Total
Professional, technical and kindred	*	17	18	33	22
Managers and administrators, except farm	*	0	2	12	4
Sales	*	4	3	2	3
Clerical and kindred	*	6	24	19	21
Crafts	*	20	24	14	22
Operatives, except transport	*	11	7	2	6
Transport equipment operatives	*	3	1	0	1
Laborers, except farm	*	3	1	0	1
Farm laborers	*	0	1	0	1
Farmers and farm managers	*	0	1	0	1
Services, except private household	*	16	16	10	14
Private household workers	*				
Occupation not reported	*	19	3	6	5
Total percent		100	100	100	100
Total number (thousands)	31	179	1428	545	2183

*Insufficient number of sample cases.

UNIVERSE: Civilian youth age 16-22 who were not enrolled in high school at time of training or on the survey date and who participated in training for at least one month.

Table 8.4 Occupations for Which Post High School Vocational Training Was Taken, by School Enrollment Status

(Percentage distributions)

Occupations	High school dropout	College student	Nonenrolled high school graduate	Total
Professional, technical and kindred	15	41	18	22
Managers and administrators, except farm	0	4	5	4
Sales	4	3	2	3
Clerical and kindred	7	14	24	21
Crafts	24	21	22	22
Operatives, except transport	13	3	7	6
Transport equipment operatives	2	0	1	1
Laborers, except farm	4	1	1	1
Farm laborers	0	0	1	1
Farmers and farm managers	0	0	1	1
Services, except private household	14	11	15	14
Occupation not reported	18	3	4	6
Total percent	100	100	100	100
Total number (thousands)	210	398	1576	2183

UNIVERSE: Civilian youth age 16-22 who were not enrolled in high school at time of training and who participated in training for at least one month.

likely to enroll in professional and technical training programs and less likely to enroll in service training programs than those with less education. Craft and clerical training was more prevalent among those with exactly 12 years of education than among either of the other attainment groups. Training in sales, operative, and laboring occupations was most prevalent among those with less than 12 years of education; not surprisingly, this education group was also least represented in training for professional and technical, managerial, and clerical positions.

Similar conclusions can be drawn from Table 8.4, which relates occupation for which training was taken to educational enrollment status. College students, as would be expected, were concentrated in those areas of training taught in a college setting.[7] Forty percent of the college students in the universe had enrolled in professional or technical training. Craft and clerical training was also popular among college students.

Nonenrolled high school graduates reported substantially greater participation than college students in clerical and service training and substantially less participation in professional and technical training. Otherwise, the distributions for college students and nonenrolled high school graduates were similar, reflecting in part the fact that in years prior to the survey a respondent currently not enrolled in college could well have been a college student.

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[7] The estimated participation rates for college students should be viewed as an upper limit of the actual rates. From an examination of the responses to the questionnaire it was obvious that in some cases persons who attended vocational schools, business colleges, vocational programs at community colleges, apprenticeship programs at community colleges, etc., considered themselves to be college students. Therefore, the estimate of regular (4 year) college students is biased upward, both in total and in the subcategories affected. Especially affected are the estimates for vocational and technical institutes, barber and beauty colleges, and business colleges due to the interpretation of these courses as "college."

Twenty-four percent of the training responses of high school dropouts were in the craft training category. This was the most prevalent type of training among dropouts, and dropouts in turn participated more than any other educational group in craft training. Dropouts were also the educational group most likely to participate in sales, operative, and laborer training and least likely to participate in professional and technical, managerial and administrative, and clerical training.

The data on occupational training have shown that high school dropouts, Hispanics, and women are overrepresented in training programs for those jobs in the economy providing the least in the way of status, wages, and chance for advancement. Data on employment show similar patterns, indicating that private vocational training will likely do little to make the distribution of the jobs in the economy more equitable by moving the disadvantaged groups into better jobs.

IV. SOURCES OF TRAINING

Each person reporting training for one month or more was asked to give the setting in which the training was taken. The respondents chose from the following list of possibilities:

1. Business college
2. Nursing program
3. Apprenticeship
4. Vocational or technical institute

5. Barber or beauty college
6. Flight school
7. Correspondence course
8. Company training

When considering differences in attendance among the above sources one must realize that the specificity of the curriculum offered varies greatly among them. The most general curricula are offered by company training, correspondence courses, and vocational and technical institutes. Somewhat more specific are the curricula of business colleges and apprenticeship programs. Finally, the most limited curricula are associated with those sources of training relating to a single occupational group: flight schools, barber and beauty colleges, and nursing programs. All else equal, the setting with the most general curriculum will attract the greatest percentage of trainees.

Thirty-seven percent of the trainee responses in Table 8.5 were for the broadest category, vocational and technical institutes. The availability of training in both "male" and "female" occupations as identified in the previous section contributed to the popularity of this training source. Twenty percent of the training responses were for company training, the second most frequently attended source. Although offering occupational training in at least as many areas as vocational and technical institutes, participation in company training is somewhat limited by the necessity of being employed in order to participate. Apprenticeship programs and business colleges each accounted for approximately 11 percent of the training responses. Barber and beauty colleges, nursing programs, and flight schools had response rates of 6, 7, and 4 percent,

Table 8.5 Sources of Post High School Vocational Training, by Race and Sex

(Percentage distributions)

Source	Black	Hispanic	White	Total
	Female			
Business college	29	29	18	20
Nursing program	12	10	12	12
Apprenticeship	0	6	2	2
Vocational or technical institute	43	32	34	35
Barber or beauty college	6	14	11	10
Flight school	0	0	3	2
Correspondence course	4	2	3	3
Company training	2	0	16	14
Source not reported	5	7	2	3
Total percent	100	100	100	100
Total number (thousands)	130	55	909	1094
	Male			
Business college	0	9	2	2
Nursing program	3	5	1	1
Apprenticeship	11	0	21	19
Vocational or technical institute	36	69	38	39
Barber or beauty college	1	5	1	1
Flight school	2	0	6	6
Correspondence course	3	2	3	3
Company training	28	7	26	26
Source not reported	17	4	11	3
Total percent	100	100	100	100
Total number (thousands)	89	44	957	1091
	Total			
Business college	17	20	10	11
Nursing program	8	8	6	7
Apprenticeship	4	3	12	10
Vocational or technical institute	40	48	36	37
Barber or beauty college	4	10	6	6
Flight school	1	0	4	4
Correspondence course	3	2	3	3
Company training	13	3	2[illegible]	20
Source not reported	10	6	2	3
Total percent	100	100	100	100
Total number (thousands)	219	99	1866	2185

UNIVERSE: Civilian youth age 16-22 who were not enrolled in high school at time of training or on the survey date and who participated in training for at least one month.

respectively.

The distributions of training responses across sources by sex reflected a segregation of the sexes similar to that in the distributions of types of training. Eighty-three percent of the males took training from three sources: vocational and technical institutes (39 percent), company training (26 percent), and apprenticeship programs (20 percent). Females were more dispersed, with five sources accounting for 10 percent or more of the total: vocational and technical institutes (35 percent), company training (14 percent), business colleges (20 percent), nursing programs (12 percent), and barber and beauty colleges (10 percent). The great preponderance of females over males in business colleges, nursing programs, and barber and beauty colleges reflects the orientation of these sources toward the service occupations more often filled by women. Apprentice programs, due to their craft orientation, were male dominated. Vocational and technical institutes and company training, because of the general nature of their curricula, were prevalent responses among both sex groups, although males more frequently reported them than females.

The distribution of training responses by race was more even than the distribution by sex, but some noteworthy variations appeared. Company training accounted for 21 percent of the white trainee responses, 13 percent of the black trainee responses, and 3 percent of the Hispanic trainee responses. However, among males, blacks had a slightly higher rate of participation in company training than did whites, 28 versus 26 percent. Hispanic males had a 7 percent participation rate in company training. Among females, 16 percent of the white responses were for company training, compared to only 2 percent for blacks and no reported company training for Hispanics. The lower participation among females, especially blacks and Hispanics, and among Hispanic males warrants careful study. More than any other source of training considered here, company training involves both employer and worker choice. The relative shortage of females and Hispanic males in company training results from both a lack of offers and lack of acceptance. Further, the lack of offers could result from discrimination on the part of employers or from a scarcity of qualified applicants. Relative weights should be assigned to these conflicting possibilities before policies are designed.

Apprenticeship programs were attended more frequently by whites (12 percent) than by blacks (4 percent) or Hispanics (3 percent). Among males, 20 percent of the white responses were in this category, compared to 11 percent of the black responses and no reported participation of Hispanics in such programs. As this was primarily a male source of training the male breakdown determined to a great extent the racial breakdown. The underrepresentation of minorities and females is important here since it is through apprenticeship that workers enter the more lucrative craft occupations. Again, it is important to determine the reason for the imbalance. Since in many cases the apprenticeship programs are run by unions and/or employers, discrimination is a possibility, as is a dearth of qualified applicants due to a lack of information and/or preparation on the part of potential applicants.

Business colleges were attended most frequently by Hispanics (20 percent), followed by blacks (17 percent) and whites (10 percent). Black and Hispanic females both had approximately a 30 percent participation rate, white females an 18 percent participation rate. Among males, Hispanics participated far more in training at business colleges (9 percent) than either blacks (1 percent) or whites (2 percent). Response rates for barber and beauty colleges indicate that this source of training was far more prevalent among Hispanics than blacks or whites. The higher participation of Hispanics held for both males and females. Because business colleges and barber and beauty colleges generally offer training for the lower paying clerical and service occupations, the concentration of racial minorities and females in these sources does not bode well for their futures relative to other trainees.

Some general statements can be made regarding the relationship between education and participation in the various sources of training. The most important source overall, vocational and technical institutes, was attended most frequently by those youth with 12 years of education or less (see Table 8.6). Also, the percentage of dropouts attending vocational and technical institutes was greater than that for high school graduates (Table 8.7). College students had the lowest percentage attending this source of training.

Apprenticeship programs and barber and beauty colleges were also more popular among the less educated groups. The rate of

Table 8.6 Sources of Post High School Vocational Training, by Educational Attainment

(Percentage distributions)

Training source	0-8 years	9-11 years	12 years	13+ years	Total
Business college	*	3	11	13	11
Nursing program	*	3	4	14	7
Apprenticeship	*	13	12	7	10
Vocational or technical institute	*	39	41	23	37
Barber or beauty college	*	8	7	3	6
Flight school	*	6	3	5	4
Correspondence course	*	0	4	2	3
Company training	*	22	16	30	20
Total percent	*	100	100	100	100
Total number (thousands)	31	179	1428	545	2183

*Insufficient number of sample cases.

UNIVERSE: Civilian youth age 16-22 who were not enrolled in high school at time of training or on the survey date and who participated in training for at least one month.

Table 8.7 Sources of Post High School Vocational Training, by School Enrollment Status

(Percentage distributions)

Training source	High school dropout	College student	Nonenrolled high school graduate	Total
Business college	3	9	13	11
Nursing program	3	12	6	7
Apprenticeship	11	11	10	10
Vocational or technical institute	42	30	38	37
Barber or beauty college	7	2	7	6
Flight school	5	10	2	4
Correspondence course	3	2	4	3
Company training	19	23	19	20
Source not reported	8	2	2	3
Total percent	100	100	100	100
Total number (thousands)	210	398	1576	2184

UNIVERSE: Civilian youth age 16-22 who were not enrolled in high school at time of training or on the survey date and who participated in training for at least one month.

participation in these programs was greater for high school dropouts than graduates and least among those with education beyond high school.

Nursing programs were attended to a greater extent by college students and those with 13 or more years of education than by youth with less education, a situation which was due in part to the qualifications needed for entry and the difficulty of these programs. Also giving an undesirable upward bias to the estimate of the rate of participation among college students is the fact that nursing programs are conducted in college settings (two-year community colleges as well as four-year colleges), making college attendance and participation in a nursing program often equivalent.

V. TRAINING COMPLETION RATES

This section considers whether a program participated in was completed.[8] Of the total participation reported, 30 percent involved programs in which the trainee was still enrolled as of the survey date. Those trainees no longer enrolled can be divided into those dropping out before completion and those leaving upon completion. Sixty-six percent of those training programs in which the trainee was not enrolled at the time of the survey had been completed, but 34 percent were left by the trainee before completion.

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[8] Due to the need to take advantage of the multiple response framework, all computations are based on training responses rather than respondents.

Table 8.8 Completion Rates by Selected Characteristics

Characteristic	Female		Male		Total	
	Number no longer enrolled (in thousands)[a]	Completion rate[b]	Number no longer enrolled (in thousands)	Completion rate	Number no longer enrolled (in thousands)	Completion rate
Race						
Black	87	57	57	70	147	62
Hispanic	40	39	30	56	70	47
White	705	72	624	62	1329	67
Educational attainment						
0-8 years	c	c	c	c	c	c
9-11 years	c	c	101	53	151	55
12 years	557	72	421	59	979	66
13+ years	223	64	177	76	400	69
School enrollment status						
High school dropout	c	c	112	55	165	56
College student	106	81	142	58	248	68
Nonenrolled high school graduate	674	68	457	65	1131	67
Total	833	69	711	63	1544	66

[a] Number of training responses for which the respondent was no longer enrolled in the program as of the survey date.

[b] The percentage of the above for which the trainee had completed the training program.

[c] Number of sample observations was not sufficient to warrant presentation of the results.

UNIVERSE: Civilian youth age 16-22 who were not enrolled in high school at time of training or on the survey date and who participated in training for at least one month.

Table 8.9 Completion Rates by Region, Race, and Sex

Race and sex	Northeast		North central		South		West	
	Number no longer enrolled (thousands)[a]	Completion rate[b]	Number no longer enrolled (thousands)	Completion rate	Number no longer enrolled (thousands)	Completion rate	Number no longer enrolled (thousands)	Completion rate
Race								
Nonwhite	46	65	[c]	[c]	88	57	53	55
White	314	67	424	72	361	68	230	59
Sex								
Female	202	69	204	77	273	70	155	56
Male	158	64	250	66	177	58	127	61
Total	360	67	454	71	450	65	282	58

[a] Number of training responses for which the respondent was no longer enrolled in the program as of the survey date.

[b] The percentage of the above for which the trainee had completed the training program.

[c] Number of sample observations was not sufficient to warrant presentation of the results.

UNIVERSE: Civilian youth age 16-22 who were not enrolled in high school at time of training or on the survey date and who participated in training for at least one month.

Table 8.10 Completion Rates, by SMSA/Non-SMSA Residence and Sex

Sex	SMSA		Non-SMSA	
	Number not still enrolled (thousands)[a]	Completion rate[b] (percent)	Number not still enrolled (thousands)	Completion rate (percent)
Female	601	68	229	70
Male	460	67	238	52
Total	1061	68	467	61

[a] Number of training responses for which the respondent was no longer enrolled in the program as of the survey date.

[b] The percentage of the above for which the trainee had completed the training program.

UNIVERSE: Civilian youth age 16-22 who were not enrolled in high school at time of training or on the survey date and who participated in training for at least one month.

Table 8.8 presents training completion rates by race and sex. Overall, females had a higher completion rate than males, 69 percent versus 63 percent. The relative sizes of the completion rates for males and females varied, however, by race group and education. Among blacks and Hispanics, males had the higher completion rate, while among whites the reverse was the case. Males who had completed 13 or more years of education completed a larger percentage of their vocational training programs than their female counterparts did. Within all other educational groups for which completion rates are presented, females led males. Females exhibited their highest training completion rate in the North Central region and their lowest in the West (Table 8.9). Males had their highest completion rate in the North Central region and their lowest in the South. Females had substantially higher completion rates than males in all regions except the West. The concentration of Hispanic females in the West, with their very low completion rate, pulled down the female rate there.

Training completion rates were slightly higher for the portion of the sample living in SMSAs (Table 8.10). Although females had a slightly higher completion rate in non-SMSA areas, the male completion rate in non-SMSA areas was substantially lower than that within SMSAs.

Whites overall had the highest completion rate (67 percent) compared with 62 percent for blacks and 47 percent for Hispanics. The same hierarchy by race was evidenced among females, but among males, blacks had the highest completion rate.

Training completion rates were positively correlated with educational attainment. Youth who were high school dropouts at the time of the survey had the lowest probability of completing a vocational training class. Nonenrolled high school graduates and youth with exactly 12 years of education exhibited higher completion rates than dropouts but lower completion rates than college students and youth with more than 12 years of education.

Distribution of completion rates across enrollment categories yields further evidence of the disadvantaged position of the high school dropout. High school dropouts are not only the least likely of the educational groups to participate in vocational training, they are also the least likely to complete the training when they do enroll. Hispanics are more likely than blacks or whites to drop out of high school and other levels of educational attainment, and, of those dropping out, they are the most likely to leave vocational training before completion.

Finally, distribution of completion rates by sex yields further evidence of the dedication of white females to vocational training. Their high completion rate, together with their high participation rate reported in the previous section, runs counter to the notion that females are less interested than males in investment in their labor market futures.

VI. AMOUNT OF TRAINING RECEIVED

Data on length and intensity of training participation are available for training which occurred after January 1, 1978. Consideration is limited to the most recent training program reported by each trainee. The sample represents 733,000 of the 1,950,000 youth who participated in post high school vocational training. Data also are presented for the subsample of these trainees (506,000) who completed their most recent training courses.

On average each member of the total sample spent 869 hours in his/her most recent training program (see Table 8.11).[9] The subsample of completers spent an average of 939 hours in their most recent programs, indicating that, on average, completers spent slightly longer in training.[10]

In the full sample males on average spent slightly more time than females in their most recent programs. Females move ahead and by a larger margin when only the subsample of completers is considered. The data indicate that male noncompleters spent longer in training than their female counterparts. This could reflect the higher enrollment of males in long term on-the-job training and promotion streams which ended with a quit or layoff.

Whites, on average, spent the greatest amount of time in training, followed by Hispanics and blacks. Among completers this pattern is preserved with similar margins. Among minorities, Hispanics enroll in longer training programs than blacks but are less likely to remain in the program until

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[9] The sample means in this section are based on fairly small samples with large standard deviations. Therefore, any conclusions regarding the population must be considered tentative.

[10] This seems an obvious result, but it would also certainly have

Table 8.11 Total Hours in Training Program, by Selected Characteristics

Characteristic	For all trainees not still enrolled as of survey date		For those trainees who had completed training		Completion rate (percent)
	Average hours	Weighted sample size	Average hours	Weighted sample size	
Sex					
Females	831	406,600	986	299,100	74
Males	914	326,600	871	207,600	64
Race					
Blacks	564	71,300	576	43,800	61
Hispanics	786	36,000	a	20,400	57
Whites	907	625,900	962	442,500	71
School enrollment status					
High school dropouts	a	a	a	a	a
College student	548	145,600	632	107,800	74
High school graduate, not enrolled	985	533,400	1,071	371,000	70
Type of training					
Craftsmen	1,205	118,100	1,433	87,500	74
Services, except private household	907	99,900	a	a	73
Clerical	499	194,200	507	149,900	77
Professional, technical and kindred	1,344	180,500	1,642	94,200	52
Source of training					
Vocational/technical institute	766	244,200	926	158,200	65
Company training	686	202,500	733	165,700	82
Business college	669	84,500	a	a	
Region					
Northeast	1,258	174,800	1,2[illegible]9	116,800	67
North Central	821	166,800	962	131,100	79
South	708	234,800	780	153,500	65
West	724	156,800	775	105,400	67
Residence in SMSA					
Non-SMSA	971	225,100	1,223	151,200	67
SMSA	836	496,900	837	344,300	69
Total	869	733,100	939	506,700	69

[a] Number of sample observations was not sufficient to warrant presentation of the results.

UNIVERSE: Civilian youth age 16-22 who were not enrolled in high school at the time of training or on the survey date and who participated in training for at least one month.

completion.

The usefulness of the data relating amount of training to educational enrollment is constrained by the insufficient number of observations on dropouts. Comparisons will, therefore, be made only between nonenrolled high school graduates and college students. In the total sample, nonenrolled high school graduates spent an average of 985 hours in their reported training programs while college students averaged 548 hours. The higher figure for nonenrolled graduates results in part from this group having more incentive and time to invest in long term vocational training. When only completers are considered, the average hours figures for both groups are greater, but the margin between them changes very little.

The average hours of training for persons who attended either craft training or professional or technical training were substantially greater than for those taking clerical training or service training. The gap between these groups widens when only completers are considered. These differences are indicative of the greater complexity of occupations in the crafts and in the professional and technical areas.

Among the sources of training, only for vocational or technical institute programs and company training did sufficient observations exist to warrant presentation of average hour data. For the full sample the average time spent in training at vocational and technical institutes was somewhat higher than the average time spent in company training. For the subsample of completers the average for both sources was higher and the gap between the two sources wider than for the full sample.

The computation of average hours in training by region gives an as yet unexplained result. The Northeast had a far greater average than the other regions, whose averages fall relatively close together. For the full sample the average hours of training taken in the Northeast was 53 percent higher than in the North Central and 75 percent higher than in the South and West. When only completers are considered this gap remains, although the size of the margins decrease.

The SMSA/non-SMSA breakdown indicates that by a small margin persons living outside SMSAs attended more hours of training than those living inside them (971 hours versus 836 hours). Among those who completed training the margin widens somewhat.

VII. SUMMARY OF MAJOR FINDINGS

Although vocational training might be seen as a means of bringing the most disadvantaged groups into the labor market on a more equal footing, the results here do not support such a view. The problems that females, blacks, Hispanics, and high school dropouts face in the labor market are mirrored in the vocational training process.

Females are as dedicated as males to the training process, but the occupations for which they are being trained are the same lower paying, lower status, and lower skilled occupations in which they are concentrated today. Males and females had identical training participation rates. Females had a slightly higher completion rate. The total amounts of training taken by the two sex groups were also similiar. The distributions by sex of the types and sources of training were, however, starkly different. Craft and operative training were almost exclusively male, while clerical and service training were predominantly female. Professional training and technical and managerial training were more evenly represented, but males and females were distributed quite dissimilarly among the specific occupations within these broad occupational categories.

The sex distributions by sources of training reflected the same differences as the sex distribution by types of training. Males were far more likely to have participated in apprenticeship programs, a source associated with training in the crafts. Females participated to a much greater extent than males in those sources offering training in the clerical and service occupations traditionally filled by women--business colleges, nursing programs, and barber and beauty colleges. Also, males reported substantially greater participation in company training. Further research is warranted to determine the sources of the occupational segregation in training which feed the occupational segregation in employment.

Differences by race in the extent of participation in vocational training were evident. The training participation rate for whites was about one and one half times that for blacks and Hispanics. Hispanics had a much lower completion rate than either blacks or whites. Blacks spent the least amount of time in their reported training programs. The amount of time spent in training by Hispanics was about half way between that of blacks and whites. The types and sources of training taken by the three groups were similar, although Hispanics were more concentrated than blacks or whites in training for the lesser skilled clerical and service occupations.

Patterns of training participation varied by educational attainment and enrollment status. High school dropouts were far less likely than high school graduates to have participated in vocational training, were less likely to have finished the training taken, and were more concentrated in training for the lesser skilled and blue collar occupations. Youth with some college experience were far less likely than youth with only a high school diploma to have participated in vocational training, and the training taken by college youth was more concentrated in programs of longer duration and in those which prepare trainees for white collar occupations.

CHAPTER 9

HEALTH STATUS OF YOUTH

by Richard Santos

Most youth are not prevented or restricted in work activities because of health problems. Persons not employed during the survey week were asked if health prevented employment. Furthermore, employed youth and youth not prevented by health from working were asked if health limited the kind or amount of work they could perform. A youth responding positively to any of these inquiries was noted as having a health disability. Since health limitations generally increase with age, it is not surprising that only 6 percent (2 million) of the civilian youth sample age 14-22 reported that a health disability either prevented employment or restricted the type or amount of work they could do. Yet the impact of health status on employment was not uniform for all youth. The incidence of health disabilities as well as the nature of the health problem varied by marital status, school enrollment status, age, and sex. Table 9.1 shows, for example, that older youth and high school dropouts reported a higher incidence of overall disability than the general rate.

This chapter presents the incidence of health conditions that either prevented employment or restricted the kind or amount of work for different youth groups. The proportion of youth who sought medical consultation as well as the nature of the health conditions are also presented. Differences by age, school enrollment status, marital status, race, and sex are examined.

Table 9.1 Percent Reporting Health Restrictions, by Selected Characteristics

(Percentage distribution)

Characteristic	Health prevents work[a]	Health limits kind of work[b]	Health limits amount of work[b]	Health prevents, limits kind or amount of work[c]
Total	3	4	3	6
Age				
14-15	2	3	2	5
16-17	2	4	2	5
18-19	5	4	3	7
20-22	5	5	3	7
Enrollment status				
High school dropout	6	6	5	10
High school student	2	3	2	5
College student	2	3	2	4
Nonenrolled high school graduate	8	6	4	8
Race				
Black	3	4	3	6
Hispanic	3	3	2	5
White	3	4	3	6
Sex				
Female	4	5	3	8
Male	2	3	2	5
Marital status				
Never married	2	4	2	5
Married	11	8	6	13
Widowed, divorced, separated	9	9	6	15

[a] UNIVERSE: Civilians age 14-22 on interview date who were not employed in week preceding interview. (N=15,926,600)

[b] UNIVERSE: Civilians age 14-22 on interview date who were not prevented from working by health. (N=32,302,900)

[c] UNIVERSE: Civilians age 14-22 on interview date. (N=32,865,300)

I. HEALTH CONDITION PREVENTS EMPLOYMENT

Table 9.1 indicates that only 3 percent of youth without jobs during the survey week reported that a health condition prevented them from taking employment. Youth age 18 and over were somewhat more likely to have a health restriction than younger youth. Females without jobs were slightly more likely than males to note that a health problem prevented employment. However, there was no difference by race among those who said health kept them from working.

Two other major characteristics associated with an above average incidence of health problems were school enrollment status and marital status. For example, a higher percentage of high school dropouts and nonenrolled high school graduates than of those currently enrolled in high school or college reported that their health prevented them from working. Youth who were presently married also reported a higher incidence of health restriction that prevented employment than those who were never married or formerly married. The higher incidence of a poor health condition among youth not in college or high school or those married or once married can partially be explained by the older age of these groups: as noted above, youth age 18 and over had more health problems than younger youth.

II. HEALTH CONDITION RESTRICTS KIND OR AMOUNT OF WORK

Those not prevented from working because of health and those who were employed were asked if health would possibly restrict the kind of work they could perform. Column 2 of Table 9.1 notes that 4 percent of these youth reported such a restriction. For the most part, the health status which limited the kind or type of work was associated with characteristics similar to those which prevented employment. For example, more older youth were restricted in the type or kind of work they could do. Consistent with this age factor, those not in school or married had a higher incidence of restriction.

Youth not prevented from taking employment because of health reasons or who were employed were also asked if health limited the amount of work they could perform. Column 3 of Table 9.1 notes that the overall incidence of this health restriction was 3 percent. The proportion of youth with this type of limitation did not vary substantially by race or sex. As with other limitations, it did increase with age.

III. MEDICAL CONSULTATION

Among youth who reported that health either prevented employment or restricted the type or amount of work performed, 95 percent stated that they had consulted a physician about their health condition. Youths of different age, enrollment status, sex, and marital status consulted physicians in about the same proportions (Table 9.2). Proportionally fewer blacks had sought medical help as compared to Hispanics or whites.

IV. NATURE OF HEALTH CONDITIONS

The major causes of poor health conditions among youth fall

Table 9.2 Percentage of Youth with Health Limitations Who Sought Medical Consultation, by Selected Characteristics

Characteristic	Had medical consultation
Overall	95
Age	
14-15	93
16-17	93
18-19	92
20-22	98
Enrollment status	
High school dropout	92
High school student	94
College student	97
Nonenrolled high school graduate	95
Race	
Black	90
Hispanic	93
White	95
Sex	
Female	95
Male	94
Marital status	
Never married	94
Married	96
Widowed, divorced, separated	98

UNIVERSE: Civilians age 14-22 on interview date with limitation. (N=2,015,900) into three major areas: accidents/injuries, pregnancy/delivery, and all other medical problems. Table 9.3 presents the nature of health conditions that prevented or restricted youth employment. Overall, one-fourth of the employment-related health limitations resulted from accidents or injuries. An additional one-sixth of the health conditions were pregnancy related. In other words, four out of every ten health disabilities affecting the employment status of youth are ones without pathological origins.

The nature of the health problem varied substantially by sex and race. For example, over one-fourth of the female health limitations are accounted for by normal pregnancy or delivery. Black women had the highest incidence of health-related work limitations among females due to normal pregnancy/delivery, 41 percent. For Hispanics, the rate was one-third and for whites, one-fourth. Among males, accidents/injuries accounted for a third of the health problems. Hispanic males had the highest proportion of accidents/injuries, and blacks the lowest.

The majority of the other health conditions were all other medical conditions which were not related to accident/injury or normal pregnancy/delivery. Males constituted a greater proportion of the other medical conditions category than did females. In order to examine in more detail the nature of health conditions arising from accidents/injuries, pregnancies, and other medical conditions, a profile of youth with these conditions and more concise descriptions of their medical conditions are presented.

Table 9.3 Type of Medical Condition, by Sex and Race

(Percentage distributions)

Type of medical condition			Race									Total
	Sex		Black			Hispanic			White			
	Female	Male	Female	Male	Total	Female	Male	Total	Female	Male	Total	
Accident/ injury	18	33	9	28	16	10	38	22	20	34	25	24
Pregnancy[a]	28	-	41	-	26	34	-	19	25	-	16	17
Other[b]	54	67	50	72	58	55	62	58	55	67	59	59
Total percent	100	100	100	100	100	100	100	100	100	100	100	100

[a] Pregnancy includes deliveries and pregnancies without complications.

[b] Other medical conditions are all conditions which are not accident/injury or pregnancy related.

UNIVERSE: Civilians age 14-22 on interview date who reported a health limitation. (N=2,015,900)

Accidents/Injuries

Table 9.4 presents a profile by race of persons who reported that their health limitations occurred from an accident/injury. Over eight out of every ten youths with an accident/injury limitation were white, about in proportion to their number in the population. Males and in particular minority males were more likely than females to have conditions related to accidents or injuries. In addition, high school dropouts comprised one-fifth of youth with accident/injury limitations. Accidents/injuries also tended to be more likely among older youth. Not surprisingly, most of the accidents or injuries are of recent origin. Nearly half (46 percent) of these accidents or injuries occurred after January 1, 1978.

Normal Pregnancy/Delivery[1]

Table 9.5 presents a profile by race of the 330,600 females who were restricted in employment activities because of pregnancy or normal delivery. Seven out every ten women who were prevented or restricted from working because of pregnancy/delivery were white. Blacks, however, accounted for one-fifth of the pregnant women with limitations and Hispanics, 6 percent.[2] Most of these

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[1] Normal deliveries accounted for only 3 percent of all females prevented or restricted in work activities in the normal pregnancy/delivery category; tubal ligations accounted for .2 percent. For analytical purposes, pregnancy, normal delivery, and tubal ligation are combined.

[2] A profile of the pregnant Hispanic females is not presented because of the insufficient number of sample cases.

Table 9.4 Profile of Youth Limited in Employment Due to Accident or Injury, by Race

(Percentage distributions)

Characteristic	Black	White	Total
Sex			
Female	37	50	49
Male	63	50	51
Total percent	100	100	100
Age			
14-15	24	21	21
16-17	20	16	17
18-19	42	29	30
20-21	15	35	32
Total percent	100	100	100
Enrollment status			
High school dropout	18	19	20
High school student	48	32	34
College student	18	11	12
Nonenrolled high school graduate	16	38	34
Total percent	100	100	100
Marital status			
Never married	96	87	87
Married	4	7	8
Divorced, widowed, separated	0	6	5
Total percent	100	100	100
Horizontal percentage distribution	9	86	100 [a]

UNIVERSE: Civilians age 14-22 on interview date with work limitation due to accident or injury. (N=458,500)

[a] Hispanics comprised 5 percent of the total number of respondents limited in employment by accident or injury. However, Hispanics represented an insufficient number of cases for profile analysis.

Table 9.5 Profile of Females Limited in Employment by Pregnancy or Normal Delivery, by Race

(Percentage distributions)

Characteristic	Black	White	Total
Age			
14-15	8	3	4
16-17	23	13	15
18-19	23	28	28
20-21	47	57	53
Total percent	100	100	100
Enrollment status			
High school dropout	28	37	37
High school student	20	0	5
College student	2	2	2
Nonenrolled high school graduate	50	61	56
Total percent	100	100	100
Marital status			
Never married	64	12	24
Married	34	82	71
Widowed, separated, divorced	2	6	5
Total percent	100	100	100
Horizontal percentage distribution	21	73	100 [a]

UNIVERSE: Civilian females age 14-22 on interview date with work limitation due to normal pregnancy or delivery. (N=330,600)

[a] Hispanics comprised 6 percent of the total number of females limited in employment by pregnancy. However, Hispanics represented an insufficient number of cases for profile analysis.

young females were either nonenrolled high school graduates or high school dropouts, 56 and 37 percent respectively. Nearly one-fourth of the pregnant females had never been married--about two-thirds of the blacks and 12 percent of the whites. Women age 20-21 comprised half of the normal pregnancies/deliveries. For blacks, however, nearly one-third of the pregnant women were under 18 years.

All Other Health Conditions

All other health conditions which did not arise from accidents/injuries or normal pregnancies/deliveries constituted the third major category which affected youth employment. All other health conditions comprised a myriad of medical conditions and the International Classification of Diseases was used to classify the ailment.[3] Table 9.6 categorizes these health limitations according to the ICD and reveals that four major health conditions constitute 61 percent of all other health limitations: diseases of (1) the respiratory system, (2) musculoskeletal system, (3) nervous system and sense organs, and (4) congenital anomalies. Respiratory ailments accounted for one-fifth of the health conditions of both whites and Hispanics but affected one-quarter of blacks. Diseases of the musculoskeletal system accounted for more of the medical problems among whites and Hispanics than blacks.

Problems associated with the nervous system and sense organs

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[3] For a description of the ICD code, refer to the World Health Organization, 1978.

Table 9.6 International Classifications of Diseases Codes for All other Health Conditions, by Race and Sex[a]

Characteristic			Race									Total
	Sex		Black			Hispanic			White			
	Female	Male	Female	Male	Total	Female	Male	Total	Female	Male	Total	
Diseases of respiratory system	17	28	23	31	26	19	27	23	15	28	21	22
Diseases of musculoskeletal system and connective tissue	17	13	5	8	6	8	13	10	19	13	17	15
Diseases of nervous and sense organs	9	18	12	10	11	18	5	12	8	21	13	13
Congenital anomalies[b]	11	11	5	14	9	7	16	11	12	10	11	11
Endocrine, nutritional, metabolic diseases and immunity disorders	4	7	0	0	0	11	0	6	4	9	6	5
Diseases of circulatory system	6	1	7	4	6	2	4	3	6	*	4	4
Diseases of blood or blood-forming organs	5	2	13	4	9	0	0	0	5	1	3	4
Diseases of digestive system	5	2	2	5	3	0	3	1	6	1	4	3
Symptoms involving organs, systems[c]	5	5	9	9	9	11	13	12	4	4	4	5
Circumstances other than injury, illness[d]	4	1	7	3	5	3	0	2	4	1	3	3
Diseases of genitourinary tract	2	1	8	0	4	9	0	5	1	1	1	2
Mental disorder[e]	*	4	0	7	3	0	0	0	*	4	2	2
Sprains, strains of joints, muscles	*	2	3	0	2	0	4	2	0	2	1	1
Neoplasms	2	*	0	0	0	0	0	0	2	*	1	1
Other and unspecified effects of external causes	6	3	0	2	1	6	12	9	7	3	5	5
Other[f]	7	3	8	4	6	8	4	6	7	3	5	5

*Percentage is between 0.1 and 0.5.
Some error in total percent due to rounding.

Footnotes - see next page.

Table 9.6 continued -- Footnotes

[a] Exclusive of health conditions attributable to accidents or injuries or normal pregnancy or deliveries.

[b] An abnormality present at birth, such as an organ or strcutre which is abnormal in reference to for form, structure or position.

[c] Symptoms and signs which are only identifiable to a particular system or organ but which have produced abnormal results of lab or other investigational procedures, and ill-defined conditions which have no otherwise classifiable diagnosis.

[d] This is a supplementary classification for circumstances other than injury or illness influencing one's health status. Normal pregnancy and normal delivery are separately considered (see Table 5).

[e] Mental disorder includes mental retardation.

[f] Includes skin and subcutaneous diseases, complications of the perinatal period, bacterial and viral disease, mycoses, complicationsof pregnancy and childbirth, traumatic conditions, fractures and dislocations, intercranial injuries, late effects of injuries and complications of surgery.

UNIVERSE: Civilians age 14-22 with work limitation due to health conditions other than accident, injury, normal pregnancy or normal delivery (1,220,200).

such as disorders associated with eyes and ears were almost uniform in distribution by race. The incidence of congenital anomalies also varied only slightly by race. However, 9 percent of black youth with health problems other than accident/injury or pregnancy/delivery reported diseases related to blood or blood forming organs.[4]

In contrast to the accident/injury category, most of these health conditions have afflicted youth for longer periods of time. For example, two-fifths of youth with health conditions other than normal pregnancy or accident/injury have had these health problems all their lives. For these youths, the health restrictions are more chronic in nature and indicate that the work limitation has the potential to be a lifetime one.

V. CONCLUSIONS

Only a small proportion of youth are prevented or restricted in work activities because of health problems. However, as many as an estimated 2 million youth age 14-22 report some type of health related work limitation. Nearly 40 percent of these health limitations evolved not from medical diseases but from either accidents/injuries or pregnancy related conditions. For females, and in particular blacks, the pregnancy problem is compounded by the substantial number who have never been married.

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[4] Forty percent of blacks with diseases of the blood or blood forming organs had sickle cell anemia. In addition, almost 20 percent carried the sickle cell trait.

Not all health related work restrictions, however, evolved from accidents/injuries or pregnancy/normal deliveries. Half of the youth with health limitations were afflicted by other conditions. Respiratory problems were the most common ailments for youth with other health restrictions; these affected more blacks than Hispanics or whites. A higher incidence of sickle cell anemia and heart problems related to circulatory system diseases were also found among black youth. Moreover, youth restricted by medical conditions other than accidents or pregnancy have generally been afflicted with these conditions since birth. These work restrictions will undoubtedly continue into adulthood. These findings suggest the health status of youth would be well served by preventive medical efforts in early childhood.

Chapter 9 Reference

World Health Organization. 1978. *Manual of the Statistical Classification of Diseases, Injuries, and Causes of Death*, Geneva: World Health Organization.

CHAPTER 10

PERCEPTIONS OF DISCRIMINATION AND OTHER BARRIERS TO EMPLOYMENT

by David Shapiro

Respondents age 16 and over were asked a series of questions about problems they may have encountered "in getting a good job." The questions focused on discrimination (by age, sex, and race) and on structural barriers to employment (e.g., lack of education, experience, or transportation). The percentages of youth indicating that each of these problems had caused them difficulty in getting a good job are shown in Table 10.1, stratified by sex and race jointly (multiple responses were possible).

In an effort to determine the factors associated with perceptions of discrimination and other barriers to employment, probit and cross tabular analyses were used.[1] Each type of discrimination or barrier was represented by a dichotomous variable indicating whether or not it had been a problem in getting a good job. Each of these dependent variables was then related to a series of explanatory variables that tabular analyses had indicated might be significantly associated with the particular problem.[2] The discussion below focuses on the

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[1] Responses are underestimates due to the inclusion of youth who have never looked for work. Also, there is a regression of previous problems in many cases as youth age or become employed.

[2] Probit analysis was used to permit a multivariate analysis yet avoid the econometric problems inherent in the use of ordinary least squares regressions with dichotomous dependent variables. The probit estimates, indicating which variables are significantly related to perceptions of discrimination and other barriers to employment, are included in the Appendix.

Table 10.1 Percentage of Youth Indicating That Certain Problems Had Caused Them Difficulty in Getting a Good Job, by Sex and Race

Problem	Female			Male			Total
	Black	Hispanic	White	Black	Hispanic	White	
Age discrimination	46	44	47	47	47	42	45
Sex discrimination	17	13	13	7	5	4	9
Race or nationality discrimination	22	16	3	21	20	4	7
Lack of transportation	37	37	30	43	35	25	30
Lack of experience	13	16	17	11	12	11	14
Lack of education	7	12	6	6	7	5	6
Problem with English	4	18	2	5	18	2	3

UNIVERSE: Civilians age 16-22 on interview date. (N=25,570,000)

significance of particular variables in the cross tabular analyses. Differences between the cross tabular and probit analyses will be discussed in footnotes.

I. DISCRIMINATION

Age Discrimination

The most frequently cited problem by far is age discrimination, with almost 45 percent of youth age 16-22 claiming to have been adversely affected. As indicated by the percentages in Table 10.2, perceptions of age discrimination are most strongly related to age. This strong association may be explained by the fact that protective legislation limiting the amount or timing of hours of work for individuals under age 18 restricts their employment opportunities. Alternatively, the minimum wage may contribute to the high perceptions of age discrimination by 16 and 17 year olds: if employers obliged to pay the minimum wage are able to attract sufficient numbers of youth age 18 and over, they are likely to prefer to have these older youth who will generally be more experienced and hence more productive than their counterparts under age 18.

Minority youth of both sexes as well as white females are more likely to perceive themselves as having been subject to age discrimination, relative to white males. For the most part differences by sex and race in perceptions of age discrimination are confined to 16 and 17 year olds. Within this age group, white females and also minority youth of both sexes have much higher perceptions of age discrimination than do white males.

Table 10.2 Percentage of Youth Indicating That Age Discrimination had Caused Them Difficulty in Getting a Good Job, by Age and Selected Characteristics

Characteristic	16-17	18-19	20-22	Total
Sex and race				
Female				
Black	63	46	30	46
Hispanic	63	44	29	44
White	61	50	31	47
Male				
Black	61	48	32	47
Hispanic	63	46	31	47
White	53	41	32	42
Enrollment status				
High school dropout	75	50	30	47
High school student	56	47	a	54
College student	a	48	31	40
Nonenrolled high school graduate	a	40	31	34
Government training				
Participated in training	62	54	35	48
Did not participate in training	58	44	30	44
Marital status				
Never married	58	45	31	46
Married, spouse present	74	47	31	38
Widowed, divorced, separated	a	39	29	33
Poverty status				
Income below poverty level	63	47	34	48
Income not below poverty level	59	44	31	44
Region				
Northeast	59	46	28	43
North Central	57	43	28	43
South	57	44	32	44
West	64	51	38	50
Birthplace				
Inside United States	59	46	31	45
Outside United States	54	43	26	40
Total	58	46	31	44

UNIVERSE: Civilians age 16-22 on interview date. (N=25,570,000)

[a] Insufficient number of sample cases.

These differences diminish substantially among the two older age groups. This erosion with age of differences by sex and race in perceived age discrimination corresponds closely to the large differences by sex and race in the employment experiences of younger youth noted in Chapter 4. From the perspective of the youth themselves, then, the lesser work experience of young minority youth stems at least in part from greater age discrimination.

Perceptions of age discrimination by enrollment status also vary by age. Among 16-17 year olds, dropouts are more likely to perceive themselves as subject to age discrimination than their in-school counterparts, other things equal. Among 18-19 year olds this difference has vanished, and high school graduates are less likely than either dropouts or students to see themselves as having been victimized by age discrimination. Enrollment status is unrelated to perceptions of age discrimination among the oldest youth. No strong differences in perceptions of age discrimination appear between poor and nonpoor youth.[3]

Sex Discrimination

Perceptions of sex discrimination are considerably more circumscribed than those of age discrimination. Nine percent of youth--almost 14 percent of young women and 5 percent of young men--cited sex discrimination as an employment problem (Table

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[3] Probit analysis (Table 10A.1) shows that among 20-22 year olds perceptions of age discrimination are strongest among college students, followed in turn by graduates, then dropouts. There are no significant differences based on poverty status.

10.3). Among females, blacks are somewhat more likely than whites and Hispanics to report being adversely affected by sex discrimination. Among males blacks and Hispanics are both more likely than whites to perceive themselves as having been victimized by sex discrimination, although the differences are fairly small.

College students of both sexes are more likely to perceive sex discrimination. Older youth and those who have participated in government training programs are more likely to perceive sex discrimination.[4] Youth from poverty households are also somewhat more likely to perceive sex discrimination. Young women who are widowed, divorced, or separated report sex discrimination more frequently than others.

Discrimination by Race or Nationality

Almost 7 percent of youth overall, representing about 21 percent of blacks, 18 percent of Hispanics, and 4 percent of whites, felt discrimination by race or nationality to have caused employment problems. Minority youth of both sexes are more likely than whites to cite race or nationality discrimination as a problem.[5] The percentages of youth claiming to have been

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[4] It should be noted that age often is not significant in the multivariate estimates in this chapter despite (in some cases) large gross differences by age in the cross tabulations. The high correlation between age and the distribution of youth by enrollment status tends to confound somewhat the effects of these two variables in the probit analyses. Participation in government training is also not significant in the multivariate estimates (Table 10A.2).

[5] White females are slightly (but significantly) less likely to

Table 10.3 Percentage of Youth Indicating That Sex Discrimination Had Caused Them Difficulty in Getting a Good Job, by Sex and Selected Characteristics

Characteristic	Female	Male
Race		
Black	17	7
Hispanic	13	5
White	13	4
Age		
16-17	11	4
18-19	15	4
20-22	15	6
Enrollment status		
High school dropout	14	4
High school student	11	4
College student	17	6
Nonenrolled high school graduate	14	5
Government training		
Participated in training	18	5
Did not participate in training	13	4
Marital status		
Never married	14	5
Married, spouse present	13	4
Widowed, divorced, separated	19	a
Poverty status		
Income below poverty level	19	7
Income not below poverty level	12	4
Region		
Northeast	14	5
North Central	13	4
South	13	4
West	16	6
Birthplace		
Inside United States	14	5
Outside United States	14	4
Total	14	5

UNIVERSE: Civilians age 16-22 on interview date. (N=25,570,000)

[a] Insufficient number of sample cases.

adversely affected by race or nationality discrimination are shown separately by race in Table 10.4.

Among Hispanics, females are less likely to perceive themselves as having been victimized by race or nationality discrimination. Dropouts are more likely to cite this as a problem, as are poor Hispanics: perceptions of race and nationality discrimination among Hispanics are weakest in the South and highest in the two Northern regions.

Black females and males are equally likely to cite race or nationality discrimination as a problem. Black dropouts, college students, and high school graduates are all more likely than high school students to report race or nationality discrimination. As with Hispanics, poor blacks are more likely to perceive themselves as having been victimized by race or nationality discrimination. Blacks in the Northeast are somewhat less likely to perceive this type of discrimination than blacks elsewhere in the country.

Among whites, females again are slightly less likely to perceive race and nationality discrimination.[6] Nonenrolled whites are more likely to perceive such discrimination than their student counterparts, as are white youth from poverty households. Regional differences among whites in claims of race and nationality discrimination are small.

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report race or nationality discrimination than white males, other things equal (Table 10A.3).

[6] In the multivariate analysis (Table 10A.3), females are significantly less likely to perceive race and nationality discrimination.

Table 10.4 Percentage of Youth Indicating That Race or Nationality Discrimination Had Caused Them Difficulty in Getting a Good Job, by Race and Selected Characteristics

Characteristic	Black	Hispanic	White
Sex			
Female	22	16	3
Male	21	20	4
Age			
16-17	15	14	2
18-19	21	18	3
20-22	27	21	5
Enrollment status			
High school dropout	22	25	5
High school student	15	13	2
College student	25	19	4
Nonenrolled high school graduate	28	14	5
Government training			
Participated in training	24	24	5
Did not participate in training	20	15	3
Marital status			
Never married	20	17	4
Married, spouse present	33	20	4
Widowed, divorced, separated	a	a	2
Poverty status			
Income below poverty level	23	27	8
Income not below poverty level	18	15	4
Region			
Northeast	18	24	3
North Central	23	23	4
South	22	10	3
West	21	18	5
Birthplace			
Inside United States	21	14	3
Outside United States	19	27	10
Total	21	18	4

UNIVERSE: Civilians age 16-22 on interview date. (N=25,570,000)

[a] Insufficient number of sample cases.

Two points stand out in considering perceptions of race and nationality discrimination. First, within each race group, respondents from poverty households are significantly more likely to say that they have been victimized by this type of discrimination. These individuals may well see themselves as being doubly excluded from a viable chance at attaining the American dream and lifting themselves out of poverty. Second, perceptions of race and nationality discrimination rise with age for all three race groups.

II. STRUCTURAL BARRIERS TO EMPLOYMENT

Transportation Difficulties

With regard to structural barriers to employment, lack of transportation was far and away the most frequently cited problem, mentioned by 30 percent of the respondents. The percentages of youth for whom transportation difficulties are claimed to have caused problems in getting a good job are shown in Table 10.5. Minority youth of both sexes and white females all are more likely than white males to cite lack of transportation as a barrier to employment with the difference largest for black males.

Lack of transportation diminishes as an employment problem as youth age. This change with age is reinforced by the effects of enrollment status: while dropouts are more likely than high school students to cite lack of transportation as an employment problem, youth in the two older enrollment status groups--college students and high school graduates--are less likely to do so.

Table 10.5 Percentage of Youth Indicating That Lack of Transportation Had Caused Them Difficulty in Getting a Good Job, by Selected Characteristics

Characteristic	Percentage
Sex and race	
Female	
Black	37
Hispanic	37
White	30
Male	
Black	43
Hispanic	35
White	25
Age	
16-17	34
18-19	30
20-22	26
Enrollment status	
High school dropout	44
High school student	33
College student	24
Nonenrolled high school graduate	24
Government training	
Participated in training	37
Did not participate in training	29
Marital status	
Never married	31
Married, spouse present	23
Widowed, divorced, separated	42
Poverty status	
Income below poverty level	44
Income not below poverty level	27
Region	
Northeast	33
North Central	30
South	27
West	31
Birthplace	
Inside United States	30
Outside United States	32
Total	30

UNIVERSE: Civilians age 16-22 on interview date. (N=25,570,000)

Participants in government training programs are more likely to claim to have been adversely affected by transportation difficulties, as are youth from poverty households.

Other Problems

Additional labor market problems cited with some frequency are lack of experience, lack of education, and (among Hispanics) problems with English. The percentages of youth reporting these problems are shown in Tables 10.6, 10.7, and 10.8, respectively.

Lack of experience was volunteered as a cause of problems in getting a good job by 13 percent of respondents. Interestingly enough, older youth were more likely to cite lack of experience as a problem than their younger (and presumably less experienced) counterparts. This may well reflect differences between the two groups in terms of the types of jobs sought: the younger youth, many of whom are still enrolled in high school, may search largely for part-time jobs in the service sector for which prior work experience is not necessary, while older youth respondents are more likely to be looking for careers, in which case training and/or work experience in the field in question would be much more important. Indeed, high school students are less likely than dropouts, graduates, and college students to cite lack of experience.

Apart from the effects of age and enrollment status, several other variables are related to perceptions of inexperience problems in the labor market. Females are more likely to cite experience problems than males.[7] Participants in government

Table 10.6 Percentage of Youth Indicating That Lack of Experience Had Caused Them Difficulty in Getting a Good Job, by Selected Characteristics

Characteristic	Percentage
Sex and race	
Female	
Black	13
Hispanic	16
White	17
Male	
Black	11
Hispanic	12
White	11
Age	
16-17	7
18-19	15
20-22	18
Enrollment status	
High school dropout	13
High school student	7
College student	18
Nonenrolled high school graduate	19
Government training	
Participated in training	15
Did not participate in training	13
Marital status	
Never married	13
Married, spouse present	18
Widowed, divorced, separated	19
Poverty status	
Income below poverty level	13
Income not below poverty level	14
Region	
Northeast	14
North Central	11
South	12
West	19
Birthplace	
Inside United States	13
Outside United States	15
Total	14

UNIVERSE: Civilians age 16-22 on interview date. (N=25,570,000)

Table 10.7 Percentage of Youth Indicating That Lack of Education Had Caused Them Difficulty in Getting a Good Job, by Selected Characteristics

Characteristic	Percentage
Sex and race	
Female	
Black	7
Hispanic	12
White	6
Male	
Black	6
Hispanic	7
White	5
Age	
16-17	2
18-19	7
20-22	8
Enrollment status	
High school dropout	21
High school student	2
College student	3
Nonenrolled high school graduate	6
Government training	
Participated in training	8
Did not participate in training	5
Marital status	
Never married	5
Married, spouse present	13
Widowed, divorced, separated	18
Poverty status	
Income below poverty level	7
Income not below poverty level	6
Region	
Northeast	5
North Central	5
South	7
West	7
Birthplace	
Inside United States	6
Outside United States	7
Total	6

UNIVERSE: Civilians age 16-22 on interview date. (N=25,570,000)

Table 10.8 Percentage of Hispanic Youth Indicating That English Problem Had Caused Them Difficulty in Getting a Good Job, by Selected Characteristics

Characteristic	Percentage
Sex	
Female	18
Male	18
Age	
16-17	14
18-19	19
20-22	21
Enrollment status	
High school dropout	35
High school student	12
College student	9
Nonenrolled high school graduate	10
Government training	
Participated in training	14
Did not participate in training	19
Marital status	
Never married	17
Married, spouse present	22
Widowed, divorced, separated	a
Poverty status	
Income below poverty level	24
Income not below poverty level	14
Region	
Northeast	25
North Central	21
South	9
West	20
Birthplace	
Inside United States	8
Outside United States	44
Total	18

UNIVERSE: Hispanic civilians age 16-22 on interview date. (N=1,512,000)

[a] Insufficient number of sample cases.

training programs are somewhat more likely while those living in poverty are somewhat less likely, to say that inexperience had caused them problems in getting a good job.

Six percent of youth indicated that lack of education had caused them problems in getting a good job. Not surprisingly, dropping out of high school was most important in this regard. Nonenrolled high school graduates also cite education problems significantly more often than do students, although the difference is much smaller. This latter difference, as with experience problems, most likely reflects differences between graduates and students in the kinds of jobs aspired to. Minorities and white females are more likely than white males to say that lack of education has been a problem.[8] Participants in government training programs are more likely to perceive lack of education as a barrier to employment. Whether it is the perception of this and similar problems that prompt youth to enroll in training programs or whether it is participation in such programs that enhances perception of these problems cannot be determined from the data at hand.

Age is also strongly related to perceptions of lack of education as a barrier to employment. The combined effects of age and dropout status suggest that as the experience of dropouts

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[7] In the multivariate analysis, minorities and white females are all more likely to cite inexperience problems, with the differences being statistically significant for Hispanics and white females (Table 10A.5).

[8] Only Hispanic and white females are significantly more likely to cite education problems, other things equal (Table 10A.6).

in the labor market increases, the constraining effects of low educational attainment become more readily evident.

Difficulty with the English language is cited as a barrier to employment by over 17 percent of Hispanic youth. The analysis is confined to these youth. Substantial differences are apparent by enrollment status: relative to high school students, lower proportions of graduates and college students and much higher proportions of dropouts reported employment-related problems with English. In addition, older Hispanic youth are more likely to cite problems with English, suggesting that among older Hispanic dropouts such problems may be a serious impediment to desirable employment.

Further differences in the frequency of language problems are also evident. Hispanics from the two northern regions and from the West are more likely than those in the South to report problems with English. Almost 45 percent of those born outside the United States report problems with English. Hispanic youth from poverty households are more likely to cite English as a problem, while participants in government training programs are less likely to do so. This latter difference suggests that Hispanic youth with English problems may be either less cognizant of the existence of training programs for which they are eligible, or less willing and/or able to enroll in these programs.

III. SUMMARY AND CONCLUSIONS

The analyses of this chapter show that perceptions of discrimination and other barriers to employment are generally related to sex and race, enrollment status, and poverty status. Minority youth and white females are more likely than white males to perceive themselves as having been hindered by age, sex, or race discrimination in the labor market.[9] These same groups are also disproportionately likely to cite transportation problems as a barrier to desirable employment.

School dropouts are more likely than high school students to perceive themselves as adversely affected by age and sex discrimination and by each of the other barriers to employment considered in this chapter. Employment problems linked to lack of experience or lack of education are cited more frequently by older youth, suggesting that for older dropouts in particular these structural problems are particularly severe.

Finally, youth from poverty households are significantly more likely to perceive themselves as having been adversely affected by sex discrimination and--within each race group--by race or nationality discrimination.[10] In addition, these youth are also significantly more likely to cite transportation difficulties as a problem in their efforts to find desirable employment. To the extent that these perceptions accurately reflect the experiences of low income youth in the labor market, the desirability of efforts aimed at reducing discrimination and other barriers to employment as a means of promoting equality of opportunity in the labor market is underscored.

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[9] The sole exception to this statement is the lesser perception of race discrimination by white females.

[10] This is the case even after controlling for sex, race, enrollment status, etc.

Table 10A.1 Propensity of Youth to Indicate That Age Discrimination Had Caused Them Difficulty in Getting a Good Job: Probit Results

Independent variable	16-17 Years		18-19 Years		20-22 Years		Total	
	Coefficient	Asymptotic t-value	Coefficient	Asymptotic t-value	Coefficient	Asymptotic t-value	Coefficient	Asymptot t-value
Age	--	--	--	--	--	--	-0.20408**	-17.29
Hispanic males	0.19599*	2.07	0.00981	0.10	-0.00269	-0.03	0.07167	1.27
Black males	0.14852*	1.89	0.06267	0.76	-0.00629	-0.07	0.07042	1.47
White males	--	--	--	--	--	--	--	--
Hispanic females	0.16235+	1.78	0.00119	0.01	-0.12532	-1.26	0.01431	0.26
Black females	0.16380*	2.06	0.01919	0.24	-0.08862	-1.02	0.03800	0.81
White females	0.17103**	2.71	0.13814*	2.18	0.00403	-0.06	0.10574**	2.90
Dropouts	0.34971**	4.69	-0.02566	-0.36	0.38215	1.23	0.14478**	3.16
High school students	--	--	--	--	a	a	--	--
College students	a	a	-0.05497	-0.78	0.57368+	1.86	0.10664**	3.60
Nonenrolled high school graduates	a	a	-0.17649**	-2.61	0.44294	1.44	0.07022	1.40
Income below poverty level	-0.00322**	-5.37	0.03334	0.52	-0.01868	-0.28	0.00888	0.25
Missing income data	-0.12382+	-1.96	0.04405	0.75	-0.03831	-0.62	-0.03650	-1.03
Intercept	0.12891**	2.71	-0.08198	-1.22	-0.92150**	-2.99	3.55669**	17.69
Chi-square	42.95		14.34		15.90		575.08	
Number of respondents	2929		2803		2820		8552	

[a] Insufficient number of sample cases.

+Significant at the .10 level, two-tailed test.

*Significant at the .05 level, two-tailed test.

**Significant at the .01 level, two-tailed test.

Table 10A.2 Propensity of Youth to Indicate That Sex Discrimination Had Caused Them Difficulty in Getting a Good Job: Probit Results

Independent variable	Females		Males		Total	
	Coefficient	Asymptotic t-value	Coefficient	Asymptotic t-value	Coefficient	Asymptotic t-value
Age	0.01699	0.85	0.01396	0.49	0.01524	0.93
Hispanic males	--	--	0.16669+	1.73	0.14365	1.52
Black males	--	--	0.28836**	3.59	0.28013**	3.64
White males	--	--	--	--	--	--
Hispanic females	-0.10193	-1.48	--	--	0.59583**	7.67
Black females	0.04136	0.72	--	--	0.73491**	10.93
White females	--	--	--	--	0.68883**	12.10
Dropouts	-0.01341	-0.16	-0.05605	-0.50	-0.02834	-0.42
High school students	--	--	--	--	--	--
College students	0.22991**	2.65	0.26716*	2.15	0.24348**	3.43
Nonenrolled high school graduates	0.04933	0.57	0.08372	0.67	0.06273	0.89
Income below poverty level	0.12416*	2.07	0.11222	1.31	0.12252*	2.50
Missing income data	0.00420	0.07	0.09156	1.06	0.03344	0.69
Never married	--	--	--	--	--	--
Widowed, separated, divorced	0.28925*	2.43	0.07795	0.22	0.26938*	2.43
Married spouse present	0.05356	0.72	-0.14818	-0.89	0.02211	0.34
Participation in government-sponsored training	0.12279*	2.16	0.06190	0.76	0.09968*	2.15
Intercept	-1.50538**	-4.43	-2.14035**	-4.39	-2.16352**	-7.65
Chi-square	41.87		31.40		303.88	
Number of respondents	4445		4106		8551	

+Significant at the .10 level, two-tailed test.
*Significant at the .05 level, two-tailed test.
**Significant at the .01 level, two-tailed test.

Table 10A.3 Propensity of Youth to Indicate That Race or Nationality Discrimination Had Caused Them Difficulty in Getting a Good Job: Probit Results

Independent variable	Blacks		Hispanics		Whites		Total	
	Coefficient	Asymptotic t-value	Coefficient	Asymptotic t-value	Coefficient	Asymptotic t-value	Coefficient ·	Asymptoti t-value
Age	0.03942	1.52	0.04516	1.43	0.04135	1.55	0.04244**	2.67
Hispanic males	--	--	--	--	--	--	0.83788**	11.01
Black males	--	--	--	--	--	--	0.89537**	13.57
White males	--	--	--	--	--	--	--	--
Hispanic females	--	--	-0.19847*	-2.42	--	--	0.63941**	8.37
Black females	-0.01448	-0.23	--	--	--	--	0.89648**	13.78
White females	--	--	--	--	-0.11734$^+$	-1.75	-0.11712$^+$	-1.77
Dropouts	0.17952$^+$	1.78	0.27347*	2.33	0.29481*	2.51	0.25172**	3.99
High school students	--	--	--	--	--	--	--	--
College students	0.28000*	2.42	0.14036	0.87	0.12162	0.94	0.17155*	2.30
Nonenrolled high school graduates	0.35842**	3.27	-0.06444	-0.42	0.30806*	2.50	0.25275**	3.56
Income below poverty level	0.19751**	2.74	0.43942**	4.68	0.21089*	2.36	0.26035**	5.51
Missing income data	0.12423	1.54	-0.01350	-0.12	-0.03658	-0.43	0.04438	0.86
Northeast	-0.14510$^+$	-1.65	0.43244**	3.56	-0.00058	-0.01	0.03661	0.66
North Central	0.00304	0.03	0.41739*	2.54	0.03493	0.41	0.06104	1.13
South	--	--	--	--	--	--	--	--
West	0.01179	0.09	0.27132*	2.56	0.19851*	2.00	0.10377$^+$	1.75
Intercept	-1.79372*	-4.03	-2.16771**	-4.00	-2.74440**	-5.97	-2.77394**	-10.04
Chi-square	52.90		64.57		45.12		653.54	
Number of respondents	2177		1395		4980		8552	

$^+$Significant at the .10 level, two-tailed test.
*Significant at the .05 level, two-tailed test.
**Significant at the .01 level, two-tailed test.

Table 10A.4 Propensity of Youth to Indicate That Lack of Transportation Had Caused Them Difficulty in Getting a Good Job: Probit Results

Independent variable	Coefficient	Asymptotic t-value
Age	-0.02106^{+}	-1.78
Hispanic males	0.13860*	2.40
Black males	0.30558**	6.22
White males	--	--
Hispanic females	0.15127**	2.71
Black females	0.17006**	3.49
White females	0.19867**	5.22
High school dropouts	0.27015**	5.89
High school students	--	--
College students	-0.20441**	-3.80
Nonenrolled high school graduates	-0.17575**	-3.41
Income below poverty level	0.31187**	8.56
Missing income data	0.08512*	2.34
Participated in government-sponsored training	0.13107**	3.74
Intercept	-0.26363	-1.31
Chi-square	385.61	
Number of respondents	8552	

*Significant at the .05 level, two-tailed test.

**Significant at the .01 level, two-tailed test.

Table 10A.5 Propensity of Youth to Indicate That Lack of Experience Had Caused Them Difficulty in Getting a Good Job: Probit Results

Independent variable	Coefficient	Asymptotic t-value
Age	0.04801**	3.33
Hispanic males	0.17712*	2.43
Black males	0.05040	0.77
White males	--	--
Hispanic females	0.29589**	4.36
Black females	0.10644+	1.70
White females	0.25752**	5.55
High school dropouts	0.25372**	4.12
High school students	--	--
College students	0.45279**	6.91
Nonenrolled high school graduates	0.46794**	7.34
Income below poverty level	-0.06490	-1.38
Missing income data	-0.05484	-1.23
Participated in government-sponsored training	0.05411	1.24
Intercept	-2.43960**	-9.83
Chi-square	287.99	
Number of respondents	8552	

+Significant at the .10 level, two-tailed test.

*Significant at the .05 level, two-tailed test.

**Significant at the .01 level, two-tailed test.

Table 10A.6 Propensity of Youth to Indicate That Lack of Education Had Caused Them Difficulty in Getting a Good Job: Probit Results

Independent variable	Coefficient	Asymptotic t-value
Age	0.12601**	7.22
Hispanic males	0.01147	0.12
Black males	-0.08088	-0.94
White males	--	--
Hispanic females	0.25050**	2.99
Black females	0.04476	0.54
White females	0.20409**	3.31
High school dropouts	0.98104**	12.56
High school students	--	--
College students	-0.03316	-0.30
Nonenrolled high school graduates	0.23038*	2.54
Income below poverty level	-0.06594	-1.11
Missing income data	0.01093	0.19
Participated in government-sponsored training	0.15112**	2.77
Education	-0.03457^{+}	-1.88
Intercept	-3.99793**	-12.25
Chi-square	605.59	
Number of respondents	8551	

*Significant at the .05 level, two-tailed test.

**Significant at the .01 level, two-tailed test.

Table 10A.7 Propensity of Hispanic Youth to Indicate That Problems with English Had Caused Them Difficulty in Getting a Good Job: Probit Results

Independent variable	Coefficient	Asymptotic t-value
Age	0.05126	1.50
Female	0.02778	0.30
Male	--	--
High school dropouts	0.46500**	3.71
High school students	--	--
College students	-0.61170**	-2.96
Nonenrolled high school graduates	-0.30992+	-1.78
Income below poverty level	0.29837**	2.84
Missing income data	0.11060	0.91
Participation in government-sponsored training	-0.12906	-1.21
Northeast	0.46562**	3.46
North Central	0.36429*	2.00
South	--	--
West	0.18809	1.57
Born outside the United States	1.19411**	12.67
Intercept	-2.73022**	-4.63
Chi-square	315.08	
Number of respondents	1395	

+Significant at the .10 level, two-tailed test.

*Significant at the .05 level, two-tailed test.

**Significant at the .01 level, two-tailed test.

Chapter 10 Glossary

AGE

A continuous variable measuring the age of the respondent (in years) as of the date of interview.

AGE DISCRIMINATION

A binary variable coded 1 if the respondent feels that age discrimination has caused problems in getting a good job.

BIRTHPLACE

A binary variable coded 1 if the respondent was born outside of the United States.

BLACK FEMALES

See "sex and race."

BLACK MALES

See "sex and race."

BORN OUTSIDE THE UNITED STATES

See "birthplace."

COLLEGE STUDENTS

See "enrollment status."

DROPOUTS

See "enrollment status."

EDUCATION

Actual highest grade of regular school the respondent reported having completed and gotten credit for as of the interview date. Years of college completed are denoted as 13, 14, 15, etc.

ENROLLMENT STATUS

Combines whether the respondent was enrolled in regular school on May 1st, 1979 or the interview date, whichever came first, with whether the respondent had completed 12th grade (or received a high school diploma or GED) at that date. Categories are not enrolled and did not complete 12th grade, enrolled and did not complete 12th grade, enrolled and completed 12th grade, and not enrolled and completed 12th grade. For probit analysis, four binary variables were created. Each is coded 1 if the enrollment status falls into the category being represented and 0 otherwise.

GOVERNMENT TRAINING

A binary variable coded 1 if the respondent has ever participated in a government job or job training program.

HIGH SCHOOL STUDENTS

See "enrollment status."

HISPANIC FEMALES
See "sex and race."

HISPANIC MALES
See "sex and race."

INCOME BELOW POVERTY LEVEL
See "poverty status."

LACK OF EDUCATION
A binary variable coded 1 if the respondent feels that lack of education has caused problems in getting a good job.

LACK OF EXPERIENCE
A binary variable coded 1 if the respondent feels that lack of experience has caused problems in getting a good job.

LACK OF TRANSPORTATION
A binary variable coded 1 if the respondent feels that lack of transportation has caused problems in getting a good job.

MARITAL STATUS
The respondent's marital status at the date of interview. The three categories are never married, married with the spouse present in the household, and widowed, separated or divorced. For probit analysis, three binary variables were created. Each is coded 1 if the marital status falls into the category being represented and 0 otherwise.

MARRIED SPOUSE PRESENT
See "marital status."

MISSING INCOME DATA
A binary variable coded 1 if the respondent's poverty status cannot be determined.

NEVER MARRIED
See "marital status."

NONENROLLED HIGH SCHOOL GRADUATES
See "enrollment status."

NORTHEAST
See "region."

NORTH CENTRAL
See "region."

PARTICIPATION IN GOVERNMENT-SPONSORED TRAINING
See "government training."

POVERTY STATUS
A binary variable coded 1 if the respondent lives in a

household in which income was below the CPS poverty level in 1978.

PROBLEMS WITH ENGLISH
A binary variable coded 1 if the respondent feels that problems with English have caused problems in getting a good job.

RACE OR NATIONALITY DISCRIMINATION
A binary variable coded 1 if the respondent feels that discrimination based on race or nationality has caused problems in getting a good job.

REGION
The Census region in which the respondent lived at the time of the interview. Categories are Northeast, North Central, South and West. For probit analysis, four binary variables have been created. Each is coded 1 if the respondent lived in the region being represented and 0 otherwise.

SEX DISCRIMINATION
A binary variable coded 1 if the respondent feels that discrimination based on sex has caused problems in getting a good job.

SEX AND RACE
The respondent's sex and race combined. Categories are Hispanic males, black males, white males, Hispanic females, black females, and white females. For probit analysis, six binary variables are created. Each is coded 1 if the respondent is of the sex and race being represented, 0 otherwise.

SOUTH
See "region."

WEST
See "region."

WHITE FEMALES
See "sex and race."

WHITE MALES
See "sex and race."

WIDOWED, SEPARATED, DIVORCED
See "marital status."

CHAPTER 11

ASPIRATIONS AND EXPECTATIONS FOR THE FUTURE: EDUCATION, WORK ACTIVITY, AND FERTILITY

by David Shapiro and Joan E. Crowley

During the years between 14 and 21, the question "What do I want to be when I grow up?" changes gradually to "What do I do now?". Initial occupational choice and choices about educational goals and family formation are made interdependently; any decision in one areas opens up or limits options in the others.

This chapter will focus on the aspirations and expectations of youth, describing the types of jobs they hope to obtain, the education they plan to get, and the number of children they want to have. For education and fertility, the differences between what young people want to have and what they expect to get will be explored. More explicitly than reports of aspirations, reports of expectations for education and fertility should take into account the expected barriers to achievement which the youth faces.

Throughout this chapter, we shall be concerned with the ways in which the orientation to the future varies by race, sex, and age. Ethnic differences in future orientation have implications for policies designed to affect the degree to which minorities are concentrated in the lower levels of the economy.
Expectations should also be quite different for young women than for young men. Despite dramatic changes in societal attitudes

towards traditional gender roles (Mason, et al., 1976), marked differences still appear between men's and women's actual life styles. Occupational segregation has diminished only slightly (Blau and Hendricks, 1979), and the primary provider of child care within the family continues to be the mother. These divergent adult roles affect the study of youth aspirations.

We will present the attitudes of youth in the NLS first in cross-tabular form. However, it is clear that known differences between men and women and among different ethnic and age groups can affect each of the attitudes under consideration, so, to clarify these differences, multivariate analysis will also be used. The predictors were selected because they have been linked to aspirations in previous research, or because they respond to common hypotheses about the reasons for differences by age, sex, or race.

Social class is proxied for by measures of parental education and whether or not family income meets the poverty criterion used by the Current Population Surveys of the Bureau of Census.[1] Inclusion of these variables is aimed at clarifying the interpretation of differences by race in aspirations, and is supported by much of the literature on educational expectations

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[1] For details of the specification of each variable, see the glossary at the end of this chapter. Poverty was used instead of total family income because of a relatively high level of missing data for the continuous variable. Using the dichotomy, a second dummy variable coded one if the respondent has missing data on poverty status and zero otherwise can be used in the equations, reducing problems with selective deletion of cases. The poverty variable simultaneously takes into account the number of persons in the family.

(Morgan, et al., 1979). The effect of family background is expected to change over time, becoming weaker as the youth ages and moves closer to establishing an independent life. This process of increasing independence was proxied by an interaction term between age and parental education.

The composition of the family of origin was indicated by the number of siblings and by whether the respondent lived with both natural parents at age 14. Number of siblings has been related to fertility attitudes (Mott, 1980). Large families and families which have been disrupted are expected to have fewer resources to allocate to any one child, resulting in a dampening of expectations for post secondary education, and for occupations requiring such education.

Hispanics are distinguished from the other ethnic groups by the relatively high proportion who were foreign born (25 percent as compared to 3 percent for whites and blacks). A dichotomous variable indicating whether the respondent had been born outside the U. S. was therefore included in the descriptors of family background.

Religious upbringing and frequency of current religious attendance were included in the model, primarily for their associations with fertility attitudes (Mott, 1980), and because of the differences in religious preferences by ethnicity. The interpretation of the effects of religion and religious attendance on youths' plans for the future involves two complementary processes. First, norms explicitly established by the orientation of the church itself favor certain lifestyles:

many or few children, high education, occupational achievement, or community service. Additionally, however, church attendance _per se_ is an involvement with adult society. Participation in any community organization is expected to be associated with conventional values, both because of the increased socialization pressure implied by group membership, and because of the self-selection process which makes it likely that youths who do not accept the group's orientation will not bother to attend meetings.

Fertility has been linked with rural vs. urban residence for women (Roberts and Lee, 1974). A dichotomous variable coded one if the respondent had lived in a rural area at age 14 and zero otherwise was therefore added. Additional dummy variables indicated the region of the country in which respondents lived at the time of interview, largely as a control for social context.

Marriage and parenthood are expected to be associated with changes in aspirations (Hogan, 1979; Hofferth and Moore, 1979). Questions of fertility, continued education, entry into an occupation, and/or full time homemaking are more immediate issues for these youths.[2] Somewhat related is the inclusion of enrollment status. The difference between educational aspirations and expectations is likely to be moot for youths who have left school (although some may be planning to return in the future). Out of school youths are also expected to be more immediately concerned with employment and family formation. In a sense, then, the expected relationships between enrollment status and future aspirations are similar to those expected for age.

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[2] Of course, causal interpretations must be cautious. Marriage may lower educational expectations, for example, or youths with lower educational expectations may choose to get married earlier.

A measure of sex-role traditionality similar to those used on previous NLS cohorts of women is included in the equations. This measure keys on the perception of conflict between work roles and family roles.[3] Whether the mother worked when the youth was 14 was also included, to check on possible role modeling effects, particularly for young women.

I. EDUCATIONAL ASPIRATIONS AND EXPECTATIONS

Definitions and Distributions

Respondents were asked to indicate the amount of schooling they would like to complete and the amount of education which they actually expect to complete. Virtually all respondents aspired to at least complete high school, and nearly two thirds wanted to go to college (Table 11.1) Educational aspirations do not vary greatly by sex or race. Of youth who aspire to no more than a high school diploma, minority youth and males have slightly lower aspirations than do their white and female counterparts. The percentages of minority youth aspiring to complete at least a bachelor's degree are a bit lower than those of whites, while differences by sex are mixed.

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[3] See the Appendix to this chapter for a discussion of this attitude scale and of the assumptions inherent in use of the scale as an explanatory variable in the analysis of aspirations and expectations.

Table 11.1 Educational Aspirations, by Sex and Race

(Percentage distributions)

Educational aspirations (in years)	Females			Males			Total
	Black	Hispanic	White	Black	Hispanic	White	
0-11	1	4	2	2	7	2	2
12	34	35	32	40	36	36	35
13-15	14	17	18	10	13	12	15
16	34	32	33	34	29	32	33
17 or more	18	12	15	15	16	19	17
Total percent	100	100	100	100	100	100	100
Mean	14.65	14.18	14.4	14.41	14.11	14.57	

UNIVERSE: Civilians age 14-21 on January 1, 1979. (N=32,880,000)

Congruence of Educational Expectations and Aspirations

On average, expectations are not as high as aspirations (Table 11.2). Young people with lower aspirations feel they are more likely to complete their desired level of schooling than those with higher aspirations. For younger respondents, high school completion is relatively low cost, and closer in time to the interview period than graduation from college or post-graduate training. Most older respondents have already graduated from high school, so the only room for doubt is at higher levels.

The congruence of educational aspirations and expectations, measured by the percentage of youth whose aspirations equal or exceed their expectations, is shown in Table 11.3. Although effects are generally modest, the directions of the differences by sex and race are noteworthy. Young women are generally more likely than young men to say that they will complete their aspired levels of education, as long as those aspirations are for something less than a college degree. Young women who aspire to graduate level education, however, are less likely than young men to expect to complete that level. Hispanic females generally are less likely than other females to expect to complete their desired level of education. Among males who aspire to no more than a high school education, Hispanics are less likely than others to expect to complete that level. For higher levels of education, blacks have the lowest congruence scores, with Hispanics intermediate and whites highest. Table 11.3 also shows congruence by income levels. As expected, youths from higher

Table 11.2 Educational Expectations, by Educational Aspirations

(Percentage distributions)

Educational expectations (in years)	Educational aspirations (in years)				
	0-11	12	13-15	16	17 or more
0-11	87	12	1	1	0
12	10	86	24	13	3
13-15	0	1	73	17	4
16	2	1	1	68	23
17 or more	0	0	0	1	69
Total percent	100	100	100	100	100

UNIVERSE: Civilians age 14-21 on January 1, 1979. (N=32,880,000)

Table 11.3 Congruence of Educational Aspirations and Expectations, by Sex and Race, and by Income[a]

Characteristic	Percent of sample	Educational aspirations (in years)			
		12 or fewer	13-15	16	17 or more
Female					
Black	7	91	80	67	59
Hispanic	3	81	76	60	66
White	40	89	74	69	67
Male					
Black	7	88	70	66	66
Hispanic	3	80	73	67	71
White	40	87	75	72	73
Income					
$0-$9,999	26	82	72	62	65
$10,000-$19,999	29	88	76	65	63
$20,000-$29,999	24	91	74	71	69
$30,000 or more	21	97	79	80	74
Total	100	88	75	70	68

[a] Proportion whose expectations equal or exceed their aspirations.

UNIVERSE: Civilians age 14-21 on January 1, 1979. (N=32,880,000)

income families are more likely than those from lower income families to anticipate reaching their educational goals.[4]

Determinants of Educational Expectations

Since educational expectations should be more closely linked than educational aspirations to eventual educational attainment, our focus in multivariate analysis will be on predicting expectations first, then comparing the results with prediction of aspiration.

The estimated equations are presented in Table 11.4. For both sexes, a considerable number of explanatory variables are significantly related to educational expectations, other things being equal. The model as a whole accounts for over 30 percent of the total variation in educational expectations.

Parental educational attainment is a powerful influence on the educational expectations of youth. For each gender, there is a zero-order correlation of roughly .45 between these two variables, meaning that variation in parental educational attainment alone accounts for 20 percent of the variance in the expected education of youth. The interaction term for age and parental educational attainment, which is highly significant for females and weakly significant for males, implies that the effect of parental educational attainment on the educational

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[4] We thought that the model described for general analysis of aspirations might shed some light on what types of respondents are most likely to feel that they will not actually reach their educational goals. Results, however, were trivial and will not be presented.

Table 11.4 Regression Results: Educational Attainment Expected by Youth

Independent variable	Female		Male	
	Coefficient	t-value	Coefficient	t-value
Age	0.239**	5.05	0.158**	3.08
Parental educational attainment	0.464**	7.10	0.425**	6.05
Age-parental educational attainment interaction	-0.011**	-3.15	-0.007+	-1.81
Traditionality	-0.171**	-17.43	-0.151**	-13.64
Number of siblings	-0.041**	-3.31	-0.094**	-7.01
Catholic	0.093	1.48	-0.095	-1.38
Jewish	0.755**	3.47	0.760**	3.14
Protestant	-	-	-	-
No religion	0.176	1.22	-0.444**	-3.15
Foreign born	0.263*	2.00	0.688**	4.74
Living with both parents at age 14	0.186**	2.97	0.247**	3.55
Rural at age 14	-0.069	-1.08	-0.473**	-6.76
Natural log of annual church attendance	0.126**	10.35	0.156**	12.10
Ever married	-0.898**	-9.79	-0.563**	-3.61
Ever had children	-0.893**	-8.98	-0.816**	-4.62
North east	-	-	-	-
North Central	-0.136+	-1.81	-0.162*	-1.99
South	0.045	0.59	-0.076	-0.89
West	0.044	0.50	-0.219*	-2.29
Black	0.618**	7.28	0.398**	4.19
Hispanic	0.589**	4.82	0.815**	5.92
White	-	-	-	-
Intercept	8.010	9.24	9.229	9.86
R^2 (adj)	0.317		0.310	
Number of respondents	5339		4989	

+Significant at the 10 percent level.

*Significant at the 5 percent level.

**Significant at the 1 percent level.

expectations of youth diminishes with age. For all levels of parental education, there is a positive association between age and educational aspirations, and the interaction term indicates that the age effect is smaller for higher levels of parental education. Older youth have significantly higher educational expectations than their younger counterparts, perhaps reflecting the higher average levels of education that they have already attained.[5] It would appear, then, that youth from better-educated households are instilled with high educational aspirations and expectations from an early age, and these very high expectations are scaled down with age. Youth whose parents have less schooling lack this early parental socialization, but are more apt to develop increased expectations as they grow older.

Aside from parental education, a number of other family structure measures are significantly related to educational expectations, especially among young men. Greater numbers of siblings are associated with lower expectations, other things equal. Youths who lived with both parents at age 14 had slightly higher expected schooling than other youth. Both number of siblings and number of parents present in the home help determine how much of the family's total resources can go towards the rearing and educating of each child. Higher investment should lead to higher returns.

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[5] In early regressions done for this section, a variable was included to identify students. This variable was extremely significant with a very large coefficient, and its inclusion also resulted in a larger and more highly significant coefficient for age. However, problems in interpreting causality led to the discarding of the student variable. It is entirely plausible that the higher levels of expected education "cause" continued enrollment, as well as continued enrollment causing higher educational expectations. This problem of interpretation exists for many of the variables describing the youths' current status, but it is expected that the distortions are somewhat attenuated for variables not directly involving the educational system.

Respondents born outside the United States have higher educational expectations than the native born, perhaps reflecting a striving for upward mobility in which schooling is seen as the vehicle for advancement. Male youth from rural backgrounds have significantly lower educational expectations by about half a year, while no such difference was found among females.

Religion related to educational expectations much as expected. Relative to youth brought up as Protestants, youth of both sexes who were raised in the Jewish faith have higher educational expectations by three quarters of a year. Males who did not have a religious upbringing reported a lower level of expected schooling by almost half a year. Aside from the influence of any particular religion, attendance at religious services is positively and quite significantly related to expected education.

Obligations to their new families seem to reduce educational expectations. Those youth who were parents expected to complete significantly less schooling, as did those who had been married. Marriage was particularly important for young women, but the influence of parenthood was about equal for both sexes. Both marriage and parenthood wielded substantial influence on expectations. Women who are both married and have a child expect almost two full years less education than their single, childless counterparts.

Youth with more traditional attitudes toward the role of women anticipate significantly lower levels of educational attainment, indicating that traditionality has an important influence on the educational expectations of both sexes. As one might expect, the effect is greater for females, but the sex difference is not large.

Parental education has both direct and indirect effects on educational aspirations. The indirect effect is through the strong association of parental education and sex-role traditionality (see Appendix 11A for analysis of the traditionality scale). Even with traditionality controlled, however, parental education significantly predicts educational aspiration.[6]

The patterns by sex suggest that young men are more influenced by the structure of the family of origin--the number of siblings, religious upbringing, whether the family came from someplace outside the United States, and whether the family was intact when the youth was 14 years old. Young women, on the other hand, are more influenced by whether they have gotten married or borne a child, and by the perception of potential conflict in filling both family and work roles. The educational expectations of young women may be more affected by the educational attainment of their parents and rise more with age than do those of young men.

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[6] When the expectations regressions are estimated without the traditionality measure, the coefficient of parental educational attainment is increased, reflecting its combined direct and indirect effects.

When social class and family background are controlled, minorities expect significantly more education than do whites. The cross-tabular analysis did nto reveal this difference. Apparently our model, rather than accounting for racial and ethnic differences, reveals them more closely. Education appears to be perceived by minorities as a means to otherwise unobtainable social and economic status. Table 11.4 shows that, while there is little difference in the size of the coefficients for young black and Hispanic women, Hispanics males seem to expect almost half a year more education than do black males.

The same models were estimated for educational aspirations, shown in Table 11.5. As anticipated, aspirations show less variance than expectations, probably because of the less concrete referent of aspirations. However, none of the differences between expectation and aspiration affect the major conclusions of this analysis.

To the extent that educational expectations are ultimately realized and educational attainment remains an important determinant of success in the labor market, our estimates imply that intergenerational transmission of inequality will continue. Since minority youth are disproportionately likely to come from more disadvantaged socio-economic backgrounds, their relatively high educational expectations could mitigate somewhat the degree to which inequality among today's adults is transmitted to the next generation. For this mitigating effect to be realized, however, the financial barriers to achievement of

Table 11.5 Regression Results: Educational Aspirations, by Selected Characteristics

Variables	Female		Male	
	Coefficient	t-value	Coefficient	t-value
Age by parent education	-.0089	-1.86	-.0095	-2.08*
Parental educational attainment	.434	5.03**	.426	5.15**
Age	.220	3.59**	.216	3.68**
Traditionality	-.100	-9.87**	-.114	-11.09**
Number of siblings	-.088	-5.89**	-.029	-2.10*
Religious upbringing				
Catholic	.056	.76	.090	1.27
Jewish	1.60	4.91**	.870	2.75**
No religion	-.309	-2.07*	.069	.39
Protestant	-	-	-	-
Foreign born	.631	3.77**	.423	2.84**
Rural - nonfarm	-.411	-4.82**	-.028	-.36
Rural - farm	-.404	-2.99**	.168	1.16
Parents	-.051	-.51	.190	2.04*
Religious attendance	.108	7.70**	.103	7.54**
Parent in 1979	-.706	-3.60	-.673	-5.81**
Region				
South	.172	1.88	.063	.74
West	.046	.45	.145	1.48
North central	-.005	-.05	-.099	-1.18
Northeast	-	-	-	-
Poverty	-.169	-1.62	-.133	
Mother works	-.021	-.33	.091	1.51
Ever married	-.832	-4.85**	-.856	-8.10**
Race				
Black	.449	4.27**	.578	5.94**
Hispanic	.567	3.81**	.709	5.21**
White	-	-	-	-
Constant	8.42	7.58	8.51	7.95
R^2 (adj., weighted)		.24		.23
F-ratio		59.73		57.91
Number of respondents		4175		4283

*Significant at the 5 percent level.

**Significant at the 1 percent level.

expected education must be removed or at least minimized for low-income youth. Given the high expectations of minority youth, then, continuation and expansion of existing programs providing financial aid for higher education to low-income minority youth would appear to constitute an important means for reducing inequality among the races and public dependency in general.

II. DESIRE FOR OCCUPATIONAL TRAINING

Definitions and Descriptions

Preparation for employment is not limited to the formal education provided by the public schools and by colleges. Respondents of the NLS were asked if they wanted any type of occupational training aside from regular school or college. Table 11.6 shows the responses by various demographic groups. In all categories, the majority of young people say that they would like training beyond formal education. The lowest frequency of desire for training is among those enrolled in college, and even among this highly educated group 53 percent say that they would like additional training. Those most likely to say that they would like occupational training are males, minorities, high school dropouts, the unemployed, and those from low income families.

Determinants of Desire for Additional Training

The desire for additional training beyond regular school was regressed on the family background and respondent characteristics presented at the outset of this chapter. The results, as

Table 11.6 Percentage of Respondents Desiring Additional Training, by Selected Characteristics

Characteristic	Percentage desiring additional training	Percent of sample
Sex		
Female	65	50
Male	69	50
Race		
Black	80	14
Hispanic	77	6
White	64	80
Age		
16-17	68	32
18-19	68	32
20-21	66	36
Enrollment status		
High school dropout	80	15
High school student	67	35
College student	53	20
Nonenrolled high school graduate	70	29
Income		
Less than $15,000	72	43
15,000 or more	63	57
Employment status		
Employed	68	58
Unemployed	74	13
Out of labor force	62	29
Total	67	

presented in Table 11.7, suggest that the desire for additional training is virtually independent of family background.

The most significant predictor of desire for additional training was race: blacks were much more likely than whites to express a desire for training beyond regular school. Sex-role traditionality had a significant negative relationship for young women. Respondents who were married were more likely to express a desire for additional training, as were young mothers, but the relationship for fatherhood was miniscule.

Occupational Area of Desired Training

Youth who expressed a desire for more training were asked the occupations for which they wanted to train. Overall, the most frequently mentioned areas were professional and technical, clerical, crafts and service jobs. Few systematic differences appeared in the type of training desired by region, age, or employment status. Differences by race were minor (Table 11.8).

The major variable associated with area of training desired, as usual, was gender. Very few males expressed a desire for training in clerical or service jobs, but both of these were mentioned frequently by females. Conversely, while over two fifths of the young men said that they would like training in craft occupations, fewer than 6 percent of the young women wanted to be trained for work in that category.

More than other groups, the high school dropouts said that they wanted training in crafts and operative positions (Table

Table 11.7 Regression Results: Desire for Additional Training by Selected Characteristics

Variables	Female		Male	
	Coefficient	t-value	Coefficient	t-value
Age by parent education	-.002	-1.42	.001	.80
Parental educational attainment	.030	.98	-.041	-1.36
Age	.012	.59	-.029	-1.45
Traditionality	-.007	-2.48**	.002	.73
Number of siblings	.008	1.92	-.003	-.70
Religious upbringing				
Catholic	-.021	-1.06	-.015	-.79
Jewish	-.123	-1.34	.108	1.23
No religion	-.062	-1.29	.002	.06
Protestant	-	-	-	-
Foreign born	-.016	-.38	-.043	-.97
Rural - nonfarm	.022	.98	.050	2.20*
Rural - farm	-.063	-1.59	-.028	-.80
Parents	.047	1.77	.039	1.47
Religious attendance	-.003	-.71	-.004	-1.01
Parent in 1979	.079	2.71**	.008	.17
Region				
South	.028	1.17	-.023	-.98
West	.107	3.86**	.058	2.13*
North central	.027	1.16	.013	.56
Northeast	-	-	-	-
Poverty	.021	.79	-.002	-.076
Mother works	.026	1.52	.004	.26
Ever married	.082	3.09**	.081	2.05*
Race				
Hispanic	.089	2.28	.063	1.58
Black	.125	4.53**	.120	4.17**
White	-	-	-	-
Constant	.532	1.36	1.41	3.68
R^2 (adj., weighted)		.05		.026
F-ratio		8.72		4.89
Number of respondents		3308		3155

*Significant at the 5 percent level.

**Significant at the 1 percent level.

Table 11.8 Areas of Additional Training Desired, by Sex and Race

(Percentage distributions)

Occupational area of desired training	Sex		Race			
	Female	Male	Black	Hispanic	White	Total
Professional, technical	37	29	34	28	33	33
Managers, administrators	5	5	4	4	5	5
Sales	2	1	1	1	2	2
Clerical	26	3	20	21	12	14
Crafts	6	44	20	26	27	26
Operatives, except transport	2	7	5	4	4	4
Operatives, transport	*	3	3	1	2	2
Nonfarm labor	1	2	1	1	1	1
Farmers, farm managers and farm laborers	*	1	0	*	1	1
Service workers	21	5	12	14	13	13
Total percent	100	100	100	100	100	100
Total sample	48	52	16	7	77	100

*Percentage is 0.1-0.5.
Universe: Civilians age 16-22 on interview date who reported a desire for additional training beyond school. (N=15,757,900)

Table 11.9 Areas of Additional Training Desired, by Enrollment Status

(Percentage distributions)

Occupational area of desired training	High school dropout	High school student	College student	Nonenrolled high school graduate	Total
Professional, technical	23	33	45	31	33
Managers, administrators	2	3	8	7	5
Sales	1	1	4	1	2
Clerical	16	13	11	16	14
Crafts	32	27	16	25	26
Operatives, except transport	7	4	3	4	4
Operatives, transport	3	2	*	1	2
Nonfarm labor	1	2	1	1	1
Farmers, farm managers, and farm laborers	0	1	1	1	1
Service workers	14	13	11	13	13
Total percent	100	100	100	100	100
Total sample	19	36	15	30	100

*Percentage is 0.1-0.5.
Universe: Civilians age 16-22 on interview date who reported a desire for additional training beyond school. (N=15,757,900)

11.9). Their responses suggest that dropouts, while not aspiring to formal education, may still be willing to invest their time in efforts to improve their employability in specific, non-academic areas.

Because respondents are more likely to say they want more training than to say they intend to actually seek such training, the link between these responses and training enrollment is debatable. However, even allowing for a certain level of wishful thinking, the results suggest a widespread potential for participation in training programs outside the regular school system. Even those in college are more likely than not to say that they would like to get further occupational training. The regression results suggest that, for young men and women who have already moved into adult roles (e. g., marriage and parenthood) the answer is less hypothetical. This group expects to get less formal education (Table 11.4), and undoubtedly has more immediate income needs than other youth. High school dropouts, presumably the group which has had the most difficulty with traditional education, are particularly favorable toward getting non-school training, especially in skilled trades. While these findings are preliminary, they suggest a widespread positive interest in occupational training. This interest can provide a foundation for programs to overcome the barriers to stable employment which come from the lack of occupational skills.

III. ASPIRATIONS FOR EMPLOYMENT

Definitions and Descriptions

Clearly, one of the factors affecting the decision to seek further education is the youth's vision of future occupation or activity. In a section of the questionnaire assessing aspirations, respondents were asked: "What would you like to be doing when you are 35 years old?" Those indicating that they would like to be working in the paid labor market were then asked to name the kind of work they would like to be doing.

Three fourths of the total youth population aspire to work in the labor market at age 35 in a specific occupation (Table 11.10).[7] This desire characterizes seven-eights of the young men and two-thirds of the young women. Of those not specifying a future occupation, most of the young men responded that they did not know what they would be doing, while most of the young women--almost a fourth of the total female sample--expect to be working at home. One anticipated trend which was not found was a difference between younger and older youth in the proportion who did not know what they would be doing in what for many must seem to be the distant future: if there is any trend at all it is toward a higher percentage of don't know responses among older respondents. Overall, only 10 percent said they didn't know what they would be doing, and another two percent said they would be working but did not list an occupation. The stability of these aspirations and their probability of becoming reality may

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[7] The table combines information from both the initial question and the follow-up question.

Table 11.10 Desired Activity/Occupation Group at 35, by Sex and Age

(Percentage distributions)

Desired activity or occupation	Female					Male					Total
	14-15	16-17	18-19	20-22	Total	14-15	16-17	18-19	20-22	Total	
Working, occupation not specified	2	1	2	1	2	2	2	1	1	2	2
Professional, technical	43	38	32	32	36	44	40	35	29	37	36
Managers, administrators	2	4	7	7	5	5	10	13	20	12	9
Sales	1	1	1	2	1	2	1	1	2	1	1
Clerical	12	13	12	12	12	1	1	1	1	1	7
Crafts	2	2	2	1	2	19	20	19	16	19	10
Operatives (except transportation)	1	1	2	2	2	5	4	6	4	5	3
Transportation operatives	0	0	0	0	0	4	4	2	2	3	2
Laborers	0	0	0	1	0	2	2	3	2	2	1
Farmers	0	0	0	0	0	2	2	2	2	2	1
Farm laborers	0	0	0	0	0	0	0	1	0	0	0
Service workers	8	8	6	6	7	4	2	3	4	3	5
Private household workers	0	0	0	0	0	0	0	0	0	0	0
Don't know	7	7	9	9	8	10	10	12	14	11	10
Home (out of the labor force)	20	24	26	26	24	1	2	1	2	2	13
Total percent	100	100	100	100	100	100	100	100	[illegible]	100	100

UNIVERSE: Civilians age 14-21 on January 1, 1979. (N=32,880,000)

increase with age,[8] but even 14 year olds are willing to be fairly specific about what they think they might be doing as adults.

Among those with plans to work in the labor market, almost half indicate a desire to work in professional and technical occupations.[9] This overrepresentation in high-status white collar occupations is balanced by relatively small percentages of youth desiring to work in sales, clerical, and service occupations, or as operatives and laborers. Even after we allow for continuation of secular trends in the occupational mix of the work force, we find that the aggregate aspirations of youth are excessively oriented toward high-status white-collar jobs, considering the real frequency of such jobs in the labor force. The reported desire for professional and technical jobs is also out of line with the expected levels of education and the occupations for which youths wanted out-of-school training. This unrealistic optimism seems to be a general phenomenon, not restricted to adolescents (Weinstein, 1980). At the same time, the data in the second row of Table 11.10 suggest that these aspirations move somewhat closer to reality as youth grow older. Both young men and young women show a fairly steady decline in the proportion aspiring to professional jobs as one moves from younger to older age groups.

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[8] This common sense notion is disputed to some extent by Alexander and Cook (1979), who find that aspirations for college developed in the senior year of high school are actually less likely to be carried out than college aspirations formed in earlier years.

[9] Among employed workers age 16 and over in 1978, 15 percent were in this occupational group (U. S. Department of Labor, 1979, p. 261).

The only other notable patterns of change in expectation with age are the increases in the percentages opting for managerial and administrative positions (particularly among young men) and the moderate increase with age in the proportion of young women indicating a preference for a traditional homemaker's role. These trends no doubt are related to greater exposure to and knowledge of the world of work and the changes in life-cycle perspective as young women approach child-bearing age.

Aside from the heavy overrepresentation in professional and technical occupational aspirations, sex differences in the distribution largely reflect the existing occupational differences by sex in the work force at large (Table 11.11). Occupations traditionally very heavily dominated by one sex or the other are correspondingly imbalanced in youths' aspirations by sex. However, it is of interest to note that while the proportion of young men aspiring to craft and kindred occupations is almost identical to the proportion of male employment in these jobs, the proportion of young women aspiring to clerical occupations is only about half of the corresponding proportion in the female work force.

The aspirations of youth for age 35 cross-classified by race and sex jointly are provided in Table 11.12. Among young women, blacks distinguish themselves by their aversion to the traditional homemaker role. A quarter of the whites and Hispanic women said that they anticipated being out of the labor force as homemakers, compared with less than half that proportion of

Table 11.11 1979 Occupational Aspirations of Youth for Age 35 and 1978 Occupational Distribution of Employed Persons, by Sex

(Percentage distributions)

Occupation	Occupational aspirations[a]			Actual occupation[b]		
	Female	Male	Total	Female	Male	Total
White collar	83	60	70	63	41	50
Professional, technical	54	43	48	16	15	15
Managers, administrators	8	14	12	6	14	11
Sales	2	2	2	7	6	6
Clerical	19	2	9	35	6	18
Blue collar	6	33	21	15	46	33
Crafts	2	22	13	2	21	13
Operatives	2	9	6	12	18	15
Nonfarm laborers	1	2	2	1	8	5
Service workers	11	4	7	21	9	14
Private household	0	0	0	3	0	1
Other service workers	11	4	7	18	9	12
Farm workers	1	3	2	1	4	3
Farmers, farm managers	0	2	1	0	2	2
Farm laborers, supervisors	0	0	0	1	2	1
Total percent	100	100	100	100	100	100

[a] UNIVERSE: Civilians age 14-21 on January 1, 1979 with aspirations for employment at age 35 in a specific occupation.

[b] Source for all workers: 1979 Employment and Training Report of the President, Table A-16, p. 261.

Table 11.12 Desired Activity/Occupation Group at Age 35, by Sex and Race

(Percentage distributions)

Occupation	Female			Male			Total
	Black	Hispanic	White	Black	Hispanic	White	
White collar	64	54	53	52	47	52	53
High status[a]	46	36	41	48	45	49	45
Low status[b]	19	18	12	4	2	2	8
Blue collar	4	3	4	31	32	28	16
High status[c]	1	1	2	17	21	19	10
Low status[d]	3	2	2	14	11	9	6
Service	10	8	7	2	4	3	5
Farmers and farm workers	0	0	0	1	2	3	1
Working, occupation not specified	1	2	2	2	2	1	2
Don't know	8	10	8	10	11	12	10
Home (out of the labor force)	12	23	26	2	2	2	13
Total percent ..	100	100	100	100	100	100	100

[a] Professional, technical, and kindred workers; managers and administrators (nonfarm).

[b] Sales workers; clerical and kindred workers.

[c] Craftspersons and kindred workers

[d] Operatives and nonfarm laborers.

UNIVERSE: Civilians age 14-21 on January 1, 1979.

blacks.[10] Most of the differences by race in the percentage expecting to be at home are offset by corresponding differences in the percentage expecting to be in white-collar occupations (64 percent of the blacks and 53-54 percent of Hispanics and whites). Minority women are more likely than their white counterparts to anticipate work in low-status white collar occupations and, to a lesser degree, in service occupations.

Males show distinctly less variation by race in occupational aspirations. Hispanics are somewhat less likely to anticipate work in white-collar jobs, and blacks and Hispanics are a bit more likely to expect to be in blue-collar occupations; otherwise, differences in aspirations by race among young men are minimal.

Prestige of Desired Occupation

The occupations which young people say they hope to have when they grow up can be described on two quantitative dimensions, the Duncan scale of occupational prestige and the degree of sex segregation of the occupation.

The Duncan scale is based primarily on the average education and earnings of the people in the occupation, as of 1970. While these two components are certainly correlated, certain occupations, for example several of the unionized skilled trades, require relatively little formal education but pay quite well.

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[10] Greater work expectations of black women vis-a-vis white women were also evident in the 1968 National Longitudinal Survey of young women (Sandell and Shapiro, 1980).

Other occupations, for example many positions delivering human services, require a high level of education but pay relatively poorly. Table 11.13 shows the mean values of the prestige score for the aspired occupations of youth, by sex, race, and age Perhaps the most striking result is that, in general, young women have higher prestige occupational aspirations than young men. The standard deviations for young women are smaller than for young men, reflecting the relatively narrow range of occupations selected by young women. The ambitions of young women seem to be tempered by age, with a steady decline in the mean prestige level and a gradual reduction in the standard deviations. For young men, there is little trend in the mean value of prestige, but some decline in variance.

Table 11.14 shows the results of regressing occupational prestige on the family background and respondent characteristics variables used earlier. One of the clearest results is that family background variables play a larger role in the aspirations of young women than of young men. Equally interesting is the impact of marriage and parenthood on the occupational aspirations of young men. For both young men and young women, higher levels of parental education are associated with higher prestige aspirations, but the effect of parental education is smaller for older respondents. The signs of these coefficients are the same for young women, but the effects are weaker. Working through the values of the coefficients, there is a convergence effect. Fourteen year olds from highly educated families (i.e., where a parent has graduated from college) have very high occupational

Table 11.13 Means and Standard Deviations for Prestige of Aspired Occupation, by Sex

Race	Female		Male	
	Mean	s.d.	Mean	s.d.
Black	55.6	20.9	51.3	24.4
Hispanic	56.9	20.8	48.8	26.1
White	56.7	20.2	52.1	25.3
Sample size	10,852,100		13,824,400	

Universe: Civilians age 14-21 on January 1, 1979, who specified a desired occupation for age 35. (N=24,676,500)

Table 11.14 Regression Results: Duncan Index

Variables	Female		Male	
	Coefficient	t-value	Coefficient	t-value
Age by parent education	-.090	-1.57	-.133	-2.16**
Parental educational attainment	2.57	2.50**	4.59	4.14**
Age	.953	1.29	1.69	2.15*
Traditionality	-.751	-5.45**	-.826	-6.51**
Number of siblings	-.190	-1.11	-.980	-5.21**
Religious upbringing				
Catholic	1.59	1.84	-.528	-.56
Jewish	2.15	.47	13.42	3.29**
No religion	4.23	1.89	-.400	-.20
Protestant	-	-	-	-
Foreign born	-.116	-.064	12.63	6.06**
Rural - nonfarm	-3.16	-3.26**	-6.60	-6.18**
Rural - farm	-7.54	-4.22**	-9.73	-5.73**
Parents	.115	.104	.470	.36
Religious attendance	-.018	-.11	.785	4.44**
Parent in 1979	-6.39	-4.41**	-3.064	-1.19
Region				
South	-.220	-.21	2.52	2.17*
West	-1.68	-1.40	-1.97	-1.53
North central	-3.28	-3.18	-.256	-.23
Northeast	-	-	-	-
Poverty	-1.47	-1.26	-2.47	-1.86
Mother works	.305	.41	.048	.06
Ever married	-5.54	-3.98**	-3.86	-1.77
Race				
Hispanic	3.25	1.98*	4.710	2.52**
Black	1.41	1.25	2.592	1.97*
White	-	-	-	-
Constant	38.11	2.83	6.09	.43
R^2 (adj., weighted)		.09		.14
F-ratio		14.06		28.14
Number of respondents		3002		3549

*Significant at the 5 percent level.

**Significant at the 1 percent level.

aspirations, about three points higher than the aspirations for twenty one year olds from families with the same level of parental education. For families where the parents left school in the eighth grade, the twenty-one year olds have higher aspirations than their fourteen year old counterparts, by two points for girls and four points for boys. Even at the upper end of the age range, the effect of parental education is very strong, although it is considerably diminished from the effect among the younger respondents. These results suggest both a convergence toward more realistic goals and a reduction in parental influence concomitant with growing up.

Number of siblings has a significant negative relationship to aspirations for young men only. A very large positive relationship appears, for males only, between being Jewish and the prestige of occupational aspiration. Religious attendance is also positively related to higher aspirations for boys, but not for girls. Young people born in another country were expected to be from upwardly mobile families who had chosen to leave their homeland for a chance for the higher living standard and opportunities of the United States. This expected positive influence shows up only for young men, for whom being foreign born is associated with a 12 point increase in the prestige of occupational aspiration, in contrast to the native born. The influence from being foreign-born upon young women's aspirations is very small, and negative. Being brought up in a rural setting was negatively related to the prestige of occupational aspirations, more strongly for young men than for young women.

Young men in the South tended to have higher occupational aspirations than young men in other parts of the country, other things being equal.

While family background variables were significant predictors of aspirations for young men, the measures of current family status, parenthood and marriage, were significant only for young women. Causality is not clear in this case. Whether the early (one is tempted to say premature) entry into new family ties closes off options for gaining the qualifications needed for upper level occupations, or whether those who have relatively low aspirations to begin with are more likely to marry and have children before the traditional age of majority cannot be differentiated in this analysis: both mechanisms probably operate.

Sex role traditionality was expected to be associated with lower job aspirations for young women, and this is clearly shown. However, traditionality is almost as strongly related to occupational aspirations for young men as for young women. This finding suggests that the attitudes toward women working are measuring more than simply the conflict for women between home and work roles. Again, the mechanisms of influence are unclear. Sex-role traditionality could be a measure of social class, with traditional values concentrated among blue collar families. Alternatively, although not contradicting the social class hypothesis, sex role traditionality may limit occupational choice for both men and women. Higher prestige jobs, especially those in professional and technical fields, require a higher level of education and better performance in classes than do skilled trade and operative positions. To the extent that good classroom performance is considered non-masculine, adolescent boys with highly traditional attitudes would tend to aspire to those jobs not requiring large amounts of formal education, which would lower the average prestige score of their anticipated occupations.

Women and Work: Changes in Aspirations, 1968-1979[11]

An aspect of particular interest here concerns changes over time in the aspirations of young women. The question on aspirations for the future asked in the 1979 NLS of youth was also asked in the initial (1968) NLS of young women aged 14 to 24.[12] Hence, after restricting the age range for the 1968 cohort to insure comparability, we can make fairly direct comparisons between the two NLS cohorts.

In light of the growth of the contemporary women's movement over the past decade, it is plausible to expect a shift over time in the attitudes of young women towards a greater orientation to work in the market. The data in Table 11.16 indicates that this has indeed been the case.[13] The proportion of young women opting for housewifery declined by over half for whites, and by two thirds for blacks. Clearly, the 1970's witnessed a profound change in the adult roles anticipated by young American women.

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[11] This chapter will continue in the tradition of considering sex segregation in the labor force as being of primary concern to working women. The determinants of male choice of an atypical occupation have not been much considered in the literature, perhaps because of the well-known discrepancy in pay between men's jobs and women's jobs. Obviously, however, maintenance or reduction of occupational sex segregation depends upon employment patterns of both genders.

[12] In 1968, the Center for Human Resource Research initiated a panel study of five thousand women between the ages of 14 and 24, with black women overrepresented for reliable estimation of racial differences. For details, see Shea et al., 1971.

The data in Table 11.15 stratified by age group is similar in some respects to the corresponding data for 1979 (Table 11.10). Specifically, younger females are a bit less traditional than their older counterparts, and the proportion anticipating professional and technical employment declines with age. In addition, there is increased interest in managerial occupations with age (albeit with very small percentages in 1968).

Focusing on those respondents who in 1968 had specific occupational aspirations for age 35 (Table 11.16) and comparing them with their counterparts in 1979 (Table 11.11), we see additional similarilites as well as some interesting differences. Roughly half of the respondents in each case indicate plans for work in professional and technical occupations, with clerical workers and service workers the only other occupation groups attracting more than ten percent of female youth. In both cohorts, approximately 80 percent of young women anticipate working in white collar jobs. There is a six

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[13] This comparison may be somewhat biased due to differences in instructions to interviewers concerning the initial question on future aspirations. In cases of multiple responses, interviewers in 1979 were instructed to code the most work-oriented response. No provision was made for such cases in 1968. While this undoubtedly influences the comparison, it probably accounts for only a small part of the differences between 1968 and 1979.

Table 11.15 Desired Activity/Occupation Group at Age 35, by Race and Age, 1968 NLS of Young Women

(Percentage distributions)

Occupation	Race		Age[a]			Total[a]
	Black	White	14-15	16-18	19-22	
Working, occupation not specified	2	1	1	1	1	1
Professional, technical	17	12	17	12	10	12
Managers, officials	1	1	*	*	1	1
Clerical	15	5	5	6	7	6
Sales	*	1	1	*	1	1
Craft	*	*	*	*	*	*
Operatives	2	1	*	1	2	1
Private household workers	2	0	*	*	*	*
Service workers	6	4	4	4	4	4
Farmers	*	*	*	*	*	*
Farm laborers	0	0	0	0	*	0
Laborers	0	0	0	0	*	0
Don't know, other	19	9	12	10	10	10
Home	37	66	58	64	64	63
Total percent	100	100	100	100	100	100

*Percentage is 0.1-0.5.

[a] Includes respondents whose race is other than black or white.

UNIVERSE: Women age 14-22 (from 1968 NLS of young women). (N=15,170,000)

Table 11.16 Occupational Aspirations, by Race: 1968 NLS of Young Women

(Percentage distributions)

Occupation	Black	White	Total[a]
White collar	78	78	78
Professional and technical	40	51	49
Managers and officials	2	3	2
Sales	1	3	2
Clerical	35	23	25
Blue collar	4	6	5
Craft and kindred	*	2	1
Operatives	4	4	4
Nonfarm laborers	0	0	0
Service workers	18	15	15
Private household	4	0	1
Other service	13	15	15
Farm workers	*	*	*
Total percent	100	100	100

[a] Includes respondents whose race is other than black or white.

UNIVERSE: Young women age 14-22 in 1968 with plans to work at age 35, and specifying an occupation (from 1968 NLS of Young Women). (N=3,900,000) percentage-point drop in the proportion of those expecting clerical work and a corresponding increase in the percentage with plans for professional and technical work. In addition, there is a marked increase in the proportion opting for managerial and administrative work. The percentage citing service occupations has declined; and while the percentage opting for blue-collar work is stable, young women are twice as likely to cite craft jobs in 1979. Not only are today's young women markedly more likely to opt for work in the labor market, but they also have less traditional and higher occupational aspirations than their work-oriented counterparts of the late '60's.

The increase over time in young women's expectations of future market work should result in increased human capital investments and ultimately in increased relative earnings for women.[14] Thus, the proportion of the male-female wage gap attributable to sex differences in human capital investments (largely postschool) is likely to diminish over time as these sex differences are reduced.

Sex differences in occupational aspirations are still large. Some may use this as evidence that occupational segregation is largely a matter of individual preference. However, as Laws (1979) has pointed out, job selection is affected by the perceived chances of success in the various available occupations. The lack of women in a given field can be rationally used by young women as an indicator of the likely outcome of selecting that field as a career. As more women successfully enter previously male-dominated fields, it becomes easier for succeeding cohorts to select those occupations without consideration for whether the job is "suitable" for women. For complete integration of the labor market, of course, it is equally necessary for the process to encourage men to enter currently female-dominated fields as well.

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[14] See Sandell and Shapiro, 1980, for discussion of this point.

Aspirations of young women for atypical occupations. The present section examines the young women's aspirations for occupations which are not typically female. Previous research has indicated that women in predominantly female occupations earn significantly less than women in predominantly male occupations (Jusenius, 1976; Treiman and Terrell, 1975). Thus, aspirations for atypical occupations are likely to have important consequences for the future earning power of young women. In addition, analysis of the factors contributing to the choice of an atypical occupation should shed some light on the sources of the shift away from traditional occupations and suggest directions of change for the future.

In an examination of the determinants of atypicality among young college women from an earlier NLS cohort, Brito and Jusenius (1978) considered the impact of three kinds of factors: those reflecting the familial environment or family background of the respondent, those measuring educational and labor market experiences, and those denoting potential labor market involvement.[15] Since the present analysis refers to a younger cohort of women, we have focused on the first set of factors--those indicating various aspects of the respondent's family background.

More formally, the dependent variable in the analysis is a dichotomous variable equal to one if the respondent aspires to an occupation that is disproportionately male, and otherwise zero. Thus, a value of one indicates that the respondent aspires to an occupation that is atypical for women, while a value of zero denotes respondents who aspire either to a more typically female occupation or to a traditional homemaking role.[16] By this definition, one-fourth of the sample aspires to atypical jobs for age 35.

The three most significant correlates of aspiring to an atypical occupation are traditionality, student status, and parental educational attainment (Table 11.17).[17] Females with

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[15] See Brito and Jusenius (1978: 59-68) for both a discussion of the literature underlying their empirical model and presentation and discussion of their findings.

[16] Empirically, atypical occupations are defined here as those in which the percentage of incumbents who are women falls five percentage points or more below the percentage of women in the total experienced civilian labor force as of the 1970 Census. Since women constituted 38.1 percent of the experienced civilian labor force in 1970, atypical occupations are those in which 33.1 percent or fewer of the incumbents in 1970 were women. Those youth who responded "don't know" when asked about their aspirations for age 35 were assigned a value of zero for the dependent variable.

[17] Probit analysis was used to examine the factors related to atypicality of the occupation aspired to for age 35. Variables which proved to have no relationship to atypicality, other things equal, have been deleted from the estimated equation. The final probit estimate is reported in Table 11.17.

Table 11.17 Aspirations of Young Women for Atypical Occupations: Probit Analysis

Independent variables	Coefficient	Asymptotic t-value	Partial derivative	
			At maximum	At mean
Parental educational attainment	.038**	5.97	.015	.012
Traditionality	-.086**	-11.37	-.034	-.027
Age	.014	1.38	.006	.004
Living with parents at age 14	-.127**	-2.97	-.051	-.039
Enrollment status	.362**	7.12	.144	.112
Atypicality of mother's occupation	.163**	2.77	.065	.050
Only child	-.078	-0.68	-.031	-.024
Natural log of annual church attendance	-.007	-0.80	-.003	-.002
Black	.054	1.12	.022	.017
Hispanic	.162**	2.82	.065	.050
Intercept	-.706**	-2.97	-.282	-.218
Chi-square		339.40		
Number of observations		5339		

**Significant at the 1 percent level.

more traditional attitudes about women are more likely to opt either for traditional occupations or for work in the home, while students and those whose parents have higher levels of educational attainment are more likely to aspire to atypical jobs. Since parental educational attainment and the socioeconomic status associated with education are important determinants of traditionality and student status, it is clear that parental education and background economic status are both directly and indirectly related to atypicality. Aspirations for non-traditional jobs are much more prevalent among young women from more advantaged backgrounds. These differences were not clearly related to race. Hispanics were significantly more likely than whites to aspire to atypical jobs. Despite the tradition of high rates of employment among black women, the coefficient that compares blacks with whites was not significant.

Two aspects of family structure were significant predictors of the desire for an atypical occupation. Young women who lived with both parents at age 14 are less likely to aspire to atypical jobs. Those whose mothers worked at atypical jobs in 1978 are significantly more likely to opt for atypical jobs, presumably reflecting a role-model effect, as daughters of women who themselves hold atypical jobs have a direct precedent for atypical job choice. The most common alternative in the sample to the "intact" family is the female-headed household. Mothers in such homes are likely to bear more fully the responsibility of supporting their children, and to be less sanguine about the traditional female role. The role of the father in the development of the self-concept of the daughter probably also plays a part in the effect of family intactness.

The link between family background status and atypicality, in conjunction with the positive influence of atypicality on earnings, suggests that among women atypical work is one vehicle through which intergenerational transmission of inequality in economic status can operate. In addition, the secular increase in parental educational attainment must be regarded as an important factor contributing to the greater work orientation and more atypical occupational aspirations of today's young women as compared to their counterparts of the late 1960s. Since parental educational attainment will likely continue to increase in the short to medium run, the frequency of atypical aspirations should also increase. In addition, to the extent that the proportion of young women with mothers in atypical occupations increases, even greater atypicality of occupational preferences will be shown. Whether these aspirations to jobs not traditionally held by women will be met or frustrated remains to be seen.

Policy actions that would appear to be of value include continuation of antidiscrimination efforts, particularly with regard to assuring young women ready access to nontraditional jobs and to training opportunities for such jobs. In addition, programs aimed at providing greater information to youth concerning the wide variety of occupations and job opportunities that exist--particularly those outside of professional and technical employment--would be useful in reducing the concentration of youth, especially young women, with plans for professional careers. The consequent increase expected in the dispersion of occupations to which youth aspire would enable youth in the aggregate to plan more rationally and effectively for their adult working lives.

Commitment to Employment

As in previous National Longitudinal Surveys, respondents were asked whether they would continue to work if they had enough money to live on comfortably for the rest of their lives. This item is called work commitment, since it tries to find out how committed people are to the workforce in and of itself, without the pressure of penury. As Table 11.18 shows, the level of work commitment is quite high in the population of young people. What is perhaps most remarkable is the fact that commitment to employment is very high even among young women. Ethnic differences are trivial, especially among males, with some tendency for Hispanic females to be less commited. The age-sex distribution shows some decline in commitment to the labor force among women, with no age trend among young men. The lowest percent of committed workers, however, is 75 percent, reported by Hispanic females.

The results on commitment must be interpreted with caution. The proportion of young women reporting that they would work even if there were no financial need is somewhat larger than the proportion reporting that they anticipated working at age 35, suggesting that the question may tap an ideological orientation

Table 11.18 Commitment to Employment, by Sex, Race, and Age[a]

Race and age	Female	Male
Race		
Black	80	85
Hispanic	75	85
White	79	84
Age		
14-15	82	86
16-17	80	84
18-19	76	85
20-21	78	82

[a] Percent reporting that they would continue to work if they had enough money to live on comfortably.

Universe: Civilians age 14-21. (N=32,800,000) to employment, as well as a true intention to work.

Determinants of work commitment. The strongest predictors of work commitment are traditionality, whether or not the respondent's mother had worked, marital status, and living in a rural area at age 14 (Table 11.19).[18] For young men, the only predictors which reach standard levels of significance are religious attendance and living in an intact family at age 14.

It was expected that young women who held relatively traditional views would be less likely to continue working than less traditional women. This hypothesis was certainly supported. To the extent that the model accounted for commitment to employment for young women at all, it showed that women who are attached to the traditional family role would leave the labor market if finances allowed.

IV. FERTILITY ASPIRATIONS AND EXPECTATIONS

Ideal, Desired, and Expected Fertility

A third major life decision is the number of children which young people want to have. For young women, in particular, the desire to have children, and the number of children expected, is related to the decisions about how much education to acquire, whether to work after the birth of the first child, and what type

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[18] The indicators of family background and current status were entered into a multiple regression analysis, presented in Table 11.19. Very little of the variance is explained, although the model works considerably better for young women than for young men.

Table 11.19 Regression Results: Commitment to Work Force by Selected Characteristics

Variables	Female		Male	
	Coefficient	t-value	Coefficient	t-value
Age by parent education	-.002	-2.00	.001	.84
Parental educational attainment	.034	1.95	-.017	-1.10
Age	.025	2.02*	-.015	-1.34
Traditionality	-.027	-12.45**	-.001	-.74
Number of siblings	.002	.84	.001	.49
Religious upbringing				
Catholic	-.007	-.50	-.002	-.11
Jewish	-.210	-3.12**	.042	.71
No religion	.054	1.48	-.039	-1.42
Protestant	-	-	-	-
Foreign born	.005	.16	-.023	-.74
Rural - nonfarm	.032	1.98*	.003	.21
Rural - farm	.090	3.01**	.015	.59
Parents	-.034	-1.76	-.047	-2.53**
Religious attendance	.002	.73	.013	5.15**
Parent in 1979	-.014	-.60	-.018	-.49
Region				
South	-.015	-.82	-.005	-.29
West	.004	.18	.007	.39
North central	.005	.27	.000	.004
Northeast	-	-	-	-
Poverty	-.0004	-.02	-.007	-.35
Mother works	.059	4.68**	.022	1.90
Ever married	-.109	-4.95**	-.002	-.06
Race				
Hispanic	.011	.39	-.005	-.17
Black	.02	.99	.011	.58
White	-	-	-	-
Constant	.60	2.69*	1.14	5.59
R^2 (adj., weighted)		.056		.009
F-ratio		12.56		2.84
Number		4284		4184

*Significant at the 5 percent level.

**Significant at the 1 percent level.

of job, if any, to enter. Ties between fertility expectations and occupational or educational expectations are less clear for young men.

All respondents were asked about their ideal, desired, and expected numbers of children.[19] The dominance of the two child family as an ideal is apparent from Table 11.20. However, a greater consensus around this ideal obtains among whites than among minority respondents. Sex differences in fertility ideals are minimal among whites but more evident among blacks and Hispanics, and variation around the mean tends to be smaller for whites than for minority youth. Minorities are less likely to opt for the two-child ideal and more likely to favor large families.

Desired fertility (Table 11.21) is consistently lower than ideal fertility, although again, the modal group is that for two children. Among females the distributions and means of desired fertility are quite similar for Hispanics and whites, while mean desired fertility is lower for blacks, with nearly a quarter of young black women desiring either one child or none. Among males, by contrast, whites desire fewer children and Hispanics desire more. The gap between desired and ideal fertility is widest among blacks and narrowest for whites.

Expected fertility (Table 11.22) is slightly lower overall than desired fertility, reflecting a small decline for white

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[19] The distributions of responses to these questions as well as mean values and standard deviations are provided for all respondents and separately by sex and race in Tables 11.20, 11.21, and 11.22, respectively.

Table 11.20 Ideal Fertility, by Sex and Race

(Percentage distributions)

Ideal number of children	Female				Male				
	Black	Hispanic	White	Total	Black	Hispanic	White	Total	
0	1	1	1	1	1	1	1	1	1
1	4	2	2	2	4	2	2	3	2
2	35	40	50	47	31	34	50	46	47
3	23	23	26	25	25	29	27	27	26
4	24	24	17	18	21	21	15	16	17
5 or more	13	10	5	7	18	13	5	7	7
Total percent	100	100	100	100	100	100	100	100	100
Mean value	3.17	3.05	2.76	2.84	3.30	3.19	2.72	2.83	2.83
Standard deviation	1.53	1.37	1.10	1.19	1.64	1.45	1.09	1.22	1.21
Total number (thousands)	2310	1040	13090	16440	2200	1030	13200	16440	32880

UNIVERSE: Civilians age 14-21 on January 1, 1979.

Table 11.21 Desired Fertility, by Sex and Race

(Percentage distributions)

Desired number of children	Female				Male				Total
	Black	Hispanic	White	Total	Black	Hispanic	White	Total	
0	10	6	7	7	8	5	9	8	8
1	13	7	6	7	8	3	4	5	6
2	44	48	47	46	39	41	50	48	47
3	16	18	20	19	21	26	21	21	20
4	11	15	14	14	16	17	11	12	13
5 or more	6	7	6	6	9	8	4	5	6
Total percent	100	100	100	100	100	100	100	100	100
Mean value	2.32	2.58	2.56	2.53	2.65	2.82	2.40	2.47	2.50
Standard deviation	1.59	1.49	1.48	1.50	1.68	1.53	1.34	1.41	1.46
Total number (thousands)	2310	1040	13090	16440	2200	1030	13200	16440	32880

UNIVERSE: Civilians age 14-21 on January 1, 1979.

Table 11.22 Expected Fertility, by Sex and Race

(Percentage distributions)

Number of children expected	Female				Male				Total
	Black	Hispanic	White	Total	Black	Hispanic	White	Total	
0	9	4	7	7	8	5	8	8	7
1	14	9	6	7	8	4	5	5	6
2	41	45	49	48	36	39	50	48	48
3	17	20	22	21	22	28	21	22	21
4	13	14	12	13	16	16	12	13	13
5 or more	6	7	5	5	10	8	4	5	5
Total percent	100	100	100	100	100	100	100	100	100
Mean value	2.33	2.61	2.45	2.44	2.74	2.82	2.37	2.45	2.45
Standard deviation	1.45	1.49	1.26	1.30	1.73	1.50	1.23	1.33	1.32
Total number (thousands)	2310	1040	13050	16440	2200	1030	13200	16440	32880

UNIVERSE: Civilians age 14-21 on January 1, 1979.

females. For both black females and Hispanic males, mean expected fertility is virtually identical to mean desired fertility, while for black males and Hispanic females expectations are slightly in excess of desires. Focusing directly on the distributions of expected numbers of children, we find again (as with ideal fertility) a greater consensus around two children for whites.

Some variation by race appears in the degree to which males and females agree on the number of children they expect to have. Blacks show a clear disharmony of fertility expectations, since black males expect to have, on average, 2.7 children, 0.4 more than the average for black females.[20]

Changes in Expected Fertility

When these fertility expectations are compared to those of the 1971 respondents to the NLS of Young Women, we can see changes in fertility ideals and expectations among young women in the United States during the 1970's (Tables 11.23 and 11.24).[21]

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[20] To put our findings in the context of other sources of information on fertility expectations, we compared our distributions with those available from the Current Population Survey of the Bureau of Census. The CPS does not ask fertility questions of young men, or of young women under the age of 18. Restricting the NLS sample appropriately, we find that the average number of children expected is somewhat higher for the NLS sample than for the CPS sample. Compared to the CPS women, women in the NLS are substantially less likely to expect to have no children or only one child, and are more likely to expect a family of four or more children. The most likely explanation for the discrepancy is in the differences between the two surveys in selecting household informants. More detailed consideration of this issue is included in the Appendix.

[21] Since Hispanic youth were not identified as such in the 1970

Table 11.23 Comparison of Ideal Number of Children from the 1971 NLS of Young Women with the 1979 NLS of Youth, by Race

(Percentage distributions)

Ideal number of children	Black	Hispanic and white	Total
	1971 NLS of young women[a]		
0	1	1	1
1	4	1	2
2	39	47	46
3	20	28	27
4	24	17	18
5 or more	12	6	6
Total percent	100	100	100
Mean value	3.13	2.81	2.85
	1979 NLS of youth[b]		
0	1	1	1
1	4	2	2
2	37	53	51
3	24	25	25
4	25	15	17
5 or more	10	5	5
Total percent	100	100	100
Mean value	3.09	2.69	2.75

[a] UNIVERSE: Female civilians age 17-21 in 1971 (from 1971 National Longitudinal Surveys of Young Women). (N=8,940,000)

[b] UNIVERSE: Female civilians age 17-21 on date of interview. (N=10,420,000)

Table 11.24 Comparison of Expected Number of Children, 1971 NLS of Young Women vs. 1979 NLS of Youth, by Race

(Percentage distributions)

Expected number of children	Black	Hispanic and white	Total
	1971 NLS of young women[a]		
0	6	5	5
1	12	4	5
2	43	45	45
3	18	25	24
4	14	14	14
5 or more	7	7	7
Total percent	100	100	100
Mean value	2.66	2.71	2.70
	1979 NLS of youth[b]		
0	7	7	7
1	13	6	7
2	43	52	50
3	19	21	20
4	13	11	11
5 or more	5	4	4
Total percent	100	100	100
Mean values	2.39	2.39	2.39
Total number (thousands)			10,570

[a] UNIVERSE: Young women age 17-21 in 1971 (from 1971 National Longitudinal Surveys of young women).

[b] UNIVERSE: Female civilians age 17-21 on date of interview.

Table 11.23 shows distributions by race of ideal number of children for female NLS respondents age 17-22 in 1971 and 1979. Blacks show virtually no change in mean ideal fertility. A slight decline appears among whites and Hispanics, reflecting a shift in favor of two children and away from three or more children. Fertility expectations have not remained stable: overall mean expected fertility has declined from 2.71 to 2.40, a reduction apparent for both race groups (Table 11.23).

The reduction in fertility expectations reported here for the period between 1971 and 1979 parallels that reported elsewhere in Bureau of Census data.[22] In view of the numerous studies documenting an inverse relationship between fertility and women's labor force attachment, a link between the decline in fertility expectations and the marked rise in the future work expectations of young women seems plausible.

Determinants of Fertility Expectations

The estimated coefficients from regressing fertility expectations on the model presented in this chapter are provided in Table 11.25. Although a number of variables are significantly related to the fertility expectations of both female and male youth, these variables account for only a small portion of the variation in expected numbers of children.

Parental educational attainment is positively and

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survey, they have been included in the "white and Hispanic" group in these tables.

[22] Reported in Statistical Abstract of the United States 1978, Table 87, p. 63.

Table 11.25 Regression Results: Determinants of Fertility Expectations Among Youth

	Female		Male	
	Coefficient	t-value	Coefficient	t-value
Parental educational attainment	0.017*	2.38	0.010	1.24
Number of siblings	0.063**	6.77	0.080**	7.49
Living with both parents ate age 14	0.139**	2.94	-0.064	-1.15
Rural at age 14	0.022	0.45	-0.057	-1.01
Foreign born	-0.091	-0.92	0.169	1.45
Catholic	0.216**	4.53	0.252**	4.58
Jewish	0.348*	2.11	0.176	0.90
No religion	-0.036	-0.33	-0.235*	-2.08
Protestant	-	-	-	-
Natural log of annual church attendance	0.045**	4.85	0.069**	6.66
Scale of traditional attitudes	0.046**	6.19	0.028**	3.17
Age	-0.016+	-1.72	-0.034**	-3.23
Northeast	-	-	-	-
North central	0.017	0.30	-0.036	-0.55
South	-0.252**	-4.33	-0.133+	-1.94
West	-0.011	-0.16	-0.046	-0.60
Ever married	-0.014	-0.24	-0.037	-0.35
Black	-0.068	-1.08	0.339**	4.48
Hispanic	-0.028	-0.30	0.205+	1.85
White	-	-	-	-
Intercept	1.589**	7.32	2.058**	8.03
R^2	0.038		0.049	
Number of respondents	5378		5038	

+Significant at the 10 percent level.

*Significant at the 5 percent level.

**Significant at the 1 percent level.

significantly related to the fertility expectations of young women. Among young men, the relationship is also positive, but not at standard levels of significance.

In terms of t-value, number of siblings is perhaps the single most powerful determinant of expected number of children for both young men and young women. As Mott (1980) has suggested, the number of siblings may be an excellent proxy for favorable parental attitudes toward children, and to the extent that it is, these values seem to be transmitted from parents to children.

As youth age, their fertility expectations decline, especially among males. This decline perhaps reflects more idealized expectations among younger males that drop more sharply than those of young females as the prospect of having children becomes more real.

Traditional attitudes toward the role of women are significantly associated with the fertility expectations of youth of both sexes. For this variable, the relationship is stronger among young women than among young men. Young women who lived with both parents at age 14 have significantly higher fertility expectations than their counterparts who did not live with both parents, but no such difference is present among males.[23] While family intactness is only moderately associated with our traditionality scale, the pattern suggests that young women brought up by female heads of households (the dominant pattern for homes where one of the natural parents is absent) are less favorably disposed to traditional patterns of employment and family roles. The traditionality measure uncovers primarily the perceived or anticipated conflict between work and family roles for women. As Mott (1980) has argued, this greater congruence of attitudes and expectations among young women may largely reflect the fact that the expected number of children is likely to have a greater influence on other life options for women than for men.

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[23] Remember that young women from "broken" homes were also more likely to aspire to an atypical occupation.

Attendance at religious services is positively and significantly related to expected fertility of young men and women. Other things being equal, those youth raised as Catholics or Jews have higher expected fertility than their Protestant counterparts, while youth with no religious upbringing have lower expected fertility. Finally, race differences in fertility expectations vary by sex. Minority females do not differ from whites, once the other determinants of expected numbers of children have been controlled. Minority males, by contrast, have significantly higher fertility expectations than whites.

The fertility expectations analysis has several implications, particularly if one regards the equations as predictors of future fertility levels. Low contemporary fertility implies low future fertility expectations. Continued loosening in traditional attitudes toward working women also implies lower future fertility expectations.

V. SUMMARY

Common themes emerge from this consideration of the aspirations of American youth as they enter the 1980's. Consistently positive and high aspirations toward education and training and a preference for high status jobs are adjusted downward with age, but even among the oldest groups a strong tendency remains to aspire to high levels of education and high status jobs. Minorities particularly report higher educational aspirations and expectations than whites when family background and socio-economic status are taken into account. This phenomenon could simply reflect faith on the part of minorities that through education the handicaps of relative poverty and low family resources can be overcome; it also suggests that there may be few mechanisms perceived for advancement of blacks and Hispanics outside of formal educational credentials.

Family background, as indexed by parental education and family size, is a powerful predictor of youths' orientation toward the future. The transmission of social status is more than transfer of wealth and educational investment. Social values, indicated by religious involvement and sex-role traditionality consistently predicted both educational and occupational aspirations, as well as fertility expectations.

Perhaps the most striking finding in this chapter is the strong relationship between sex-role traditionality and future plans for young men. None of the items in the scale directly mentioned any conflict for men between roles, yet highly traditional men reported lower educational expectations and occupational aspirations than their less traditional counterparts. To the extent that lower aspirations are associated with lower achievement, traditional roles may be almost as serious a barrier to the advancement of young men as they are to young women.[24]

Early adulthood, meaning early marriage or early parenthood, was consistently associated with lower aspirations, particularly for young women. Although some self-selection is probably involved because youths with initially low aspirations may be more likely to enter these roles before the traditional age of majority, it is also likely that the increased responsibilities associated with parenthood and marriage, and the concomitant need for immediate earnings result in curtailed aspirations.

There has been a sharp increase over the first NLS cohorts in the proportion of young women who expect to be employed as adults, and a shift in their aspirations toward somewhat higher status jobs and away from the clerical and service occupations. Parental education, youth education, maternal employment in an atypical job, and traditionality are all associated with aspirations of young women for atypical occupations. However, the differential between the sexes in desired adult occupations is still very large. Along with the changes in anticipated labor force participation for young women have come shifts in fertility aspirations and expectations. Young women in 1979 report that they want fewer children than did young women surveyed in 1971. The apparent trend toward smaller numbers of children makes it likely that women will, in the aggregate, experience strong child care demands for a shorter period of time than did previous generations, and have more time for full labor market commitment.

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[24] It is acknowledged that, because of the selectivity bias introduced by the opting out of the labor force of a sizeable minority of young women, no precise comparisons of the relative importance of traditional attitudes for occupational aspirations can be made between young men and young women. Relative to the importance of other predictors within the sample of young men, however, traditionality had substantial effects.

APPENDIX 11A

I. ATTITUDES TOWARDS WOMEN'S ROLES

The Scale of Traditional Attitudes

A scale measuring attitudes towards women's roles in the family and at work was constructed by summing the responses to the following five items:

1. A woman's place is in the home, not in the office or shop.
2. A wife who carries out her full family responsibilities doesn't have time for outside employment.
3. The employment of wives leads to more juvenile delinquency.
4. It is much better for everyone concerned if the man is the achiever outside the home and the woman takes care of the home and family.
5. Women are much happier if they stay at home and take care of their children.

These five were culled from an initial set of eight items included in the questionnaire. Inspection of factor analyses and inter-item correlations showed that the five selected items all correlated well with each other, while the remaining three questions were unrelated. For each item, respondents were asked if they strongly agreed, agreed, disagreed, or strongly disagreed with the statement. The final scale scores ranged from 5 to 20, with 20 representing strong agreement with each statement and thus extremely traditional attitudes. Essentially, each of the selected items deals with the conflict between work outside the home and successful fulfillment of the family roles which women have traditionally held. Table 11.A1 shows the inter-item correlations and the reliability estimate for the final scale.

Table 11A.2 shows the distributions on the traditional attitude scale by sex and race. In this table, those with scores from 5-9 on the scale are categorized as "nontraditional" while those with scores from 13-20 are called "traditional." The middle group is labeled "moderate." For the sample as a whole, these cut-offs placed 28, 46, and 26 percent of the population in the three respective categories, resulting in similar proportions of the youth propulation classified in the nontraditional and in the traditional groups. It is evident from the table, however, that traditional attitudes about women's roles and working wives are distinctly more prevalent among young men. Almost one-third of the males have very traditional attitudes, while about one-sixth hold nontraditional views. Among the young women, by contrast, nearly two fifths are nontraditional while less than one fifth expressed highly traditional views. The sex difference is most easily summarized by the different mean values on the scale: 10.3 for the young women compared with 11.6 for the young men.

Within each sex, it is clear that Hispanic youth tend in general to have the most traditional attitudes by far: nearly

Table 11A.1

Item Analysis of Sex-Role Traditionality Scale[a]

ITEM	ITEM-TOTAL CORRELATION[b]
A woman's place is in the home, not in the office or shop	.56
A wife who carries out her full family responsibilities doesn't have time for outside employment	.52
The employment of wives leads to more juvenile delinquency	.40
It is much better for everyone concerned if the man is the achiever outside the home and the woman takes care of the family	.55
Women are much happier if they stay at home and take care of their children	.48
ALPHA[c]	.74

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[a] Universe: Respondents with complete data. (N=11,469)

[b] Item-total correlations are calculated by correlating each item with the

[c] Alpha is a standard, conservative estimate of scale reliability.

Table 11A.2 Traditionality of Attitudes, by Sex and Race

(Percentage distributions)

Traditionality of attitudes	Female				Male			
	Black	Hispanic	White	Total	Black	Hispanic	White	Total
Nontraditional	38	30	39	39	19	11	18	18
Moderate	42	40	43	42	45	40	51	50
Traditional	20	29	18	19	36	49	31	32
Total percent	100	100	100	100	100	100	100	100
Mean value	10.4	11.1	10.2	10.3	11.7	12.5	11.5	11.6
Percent of sample	7	3	40	50	7	3	40	50

UNIVERSE: Civilians age 14-21 on January 1, 1979. (N=32,880,000)

half of Hispanic males and almost 30 percent of the females have highly traditional attitudes, and means are highest for Hispanics. Blacks and whites have less traditional attitudes, with roughly one-third of the males and one-fifth of the females falling into the traditional group. Finally, it is also clear that race is a distinctly secondary influence when compared to sex. The most traditional females (Hispanics) are still less traditional than the least traditional males (whites).

Determinants of Traditional Attitudes

In an attempt to analyse the sources of variation in attitudes toward women, scores on the scale of traditional attitudes were regressed on a series of variables designed to represent important aspects of the family background and the current status of each respondent, with separate equations estimated for young men and young women. The results of this estimation are shown in Table 11A.3. In general, it is evident that for both females and males a large number of characteristics are significantly related to the attitudes of youth toward women's roles.

The single most powerful determinant of traditional attitudes for both sexes is parental educational attainment: the better-educated are a youth's parents, the less traditional are the youth's attitudes toward women working, other things equal. The coefficient is a bit larger (in absolute value) for males and highly significant for both sexes. Number of siblings is positively and significantly related to traditional attitudes.

Table 11A.3 Regression Results: Determinants of Scores on the Scale of Traditional Attitudes

Independent variable	Female		Male	
	Coefficient	t-value	Coefficient	t-value
Age	-0.149**	-7.46	-0.176**	-9.23
Parental educational attainment	-0.123**	-9.26	-0.147**	-11.34
Number of siblings	0.089**	5.26	0.095**	5.59
Catholic	-0.237**	-2.70	-0.336**	-3.86
Jewish	-0.684**	-2.25	-0.760*	-2.46
No religion	0.278	1.38	-0.008	-0.04
Foreign born	0.725**	3.98	0.556**	3.02
Living with both parents at age 14	0.078	0.90	0.125	1.40
Rural at age 14	0.040	0.45	0.104	1.17
Natural log of annual church attendance	0.095**	5.58	0.053**	3.20
Student	-0.755**	-7.19	-0.637**	-6.47
Ever married	0.347**	2.63	0.435*	2.20
Ever had children	0.156	1.12	-0.226	-1.01
North central	0.264*	2.52	0.081	0.78
South	0.440**	4.12	0.507**	4.68
West	0.101	0.82	-0.149	-1.22
Northeast	--	--	--	--
Black	-0.330**	-2.79	-0.500**	-4.14
Hispanic	0.203	1.19	0.354*	2.02
White	--	--	--	--
Intercept	14.138	33.63	16.428	40.70
R^2 (adj)	0.080		0.093	
Number of respondents	5378		5039	

*Significant at the 5 percent level.

**Significant at the 1 percent level.

This variable may be a proxy for parental values favorable to home and family. If so, the results indicate that these values are transmitted from parents to their children.

Youth brought up in the Catholic church have significantly less traditional attitudes than their Protestant counterparts, as do those females raised in the Jewish faith. Perhaps more important than religious upbringing is the strength of attachment to religion, as measured by the frequency of church attendance: for both sexes, those youth who attend religious services more often have significantly more traditional attitudes.

Foreign-born youth have significantly more traditional attitudes than do their native-born counterparts, reflecting their slower assimilation into the mainstream of contemporary attitudes. Nearly 25 percent of Hispanic youth were born outside of the United States (compared to about 3 percent of whites and blacks), and separate regressions by sex-race group (not shown here) indicate that this difference in traditionality according to place of birth is particularly pronounced among Hispanic females. Those respondents who had ever been married had significantly more traditional attitudes than the never-married. Youth who resided with both parents at age 14 were also slightly more traditional, although not significantly so.

The coefficient of age is substantial and highly significant for both sexes. While slightly larger for males, the coefficient indicates in each case a movement toward less traditional attitudes as youth age and mature. Students have significantly less traditional attitudes than nonstudents, perhaps indicative of a liberalizing influence of schooling. Regional differences in traditionality are also evident, the most notable of which is the significantly more traditional attitudes of youth of both sexes who reside in the South.

Once the factors discussed have been controlled, significant race differences in traditionality remain. Blacks have significantly less traditional attitudes toward women, while among males Hispanics are significantly more traditional. In light of the distinctly more traditional attitudes of Hispanic youth overall, it was anticipated that Hispanics would have significantly higher scores on the scale even after controlling for background and personal characteristics. The estimated net Hispanic-white differences are small, however, and consideration of the coefficients of the estimated equations in conjunction with mean values separately by sex and race indicates that the major portion of the high traditionality scores of Hispanics can be ascribed to the effects of two factors: parental educational attainment and the proportion of youth who are foreign-born. Rough calculation indicates that the relatively low parental educational attainment and high proportion of foreign-born among Hispanics account for about 80 percent of the gross Hispanic-white differential in traditionality.

Comparing the two equations by sex, one is struck by the similarities of a number of estimated coefficients. In particular, the large sex difference in traditionality is not due to differences in coefficients (or means) of the independent variables--the gross difference remains embedded in the difference in the constant terms. Thus, the equations imply that comparable female and male youth will differ substantially in traditionality. The difference will be smaller the older the youth and the better-educated their parents; but in all cases the difference remains considerable. Finally, despite the presence of a fair number of significant determinants of traditional attitudes toward women, considerable variation in traditionality remains for both sexes, unaccounted for by the family background and current status variables examined here.

The analysis of the determinants of traditionality is of interest in large part because of the importance of traditionality as a significant determinant of the aspirations and expectations of youth in a number of important dimensions. As indicated in the main body of this chapter, those youth with more traditional attitudes toward women appear likely to acquire less schooling and not to anticipate adult participation in the labor force. With regard to success in the labor market, then, traditionality appears to constitute a hindrance for both sexes. Given that traditional attitudes will be stronger in households of lower socioeconomic status (suggested by the association with parental education), low status appears to be transmitted from generation to generation, not simply due to transfers of physical wealth or human capital, but also due to transmission of attitudes and values that ultimately limit the options and success of youth in the economic arena.

Methodological Considerations Regarding Use of the Scale of Traditional Attitudes

The preceding section examined the determination of traditional attitudes, with those attitudes being regarded largely as a consequence of a youth's family background. At the same time, however, this measure of traditionality is also used as an explanatory variable in attempting to account for variations in expected educational attainment, occupational aspirations, and (for women) the typicality of the activity aspired to at age 35. In addition, many of the same family background variables were used in the analysis of the determination of these expectations and aspirations. It seems appropriate, then, to consider the assumptions implicit in this approach, and the consequences of these assumptions. For simplicity, the discussion will focus on two principal dependent variables: educational expectations and occupational aspirations.

The model inherent in the estimation strategy used in this chapter is a block recursive system. A clear temporal ordering of outcomes is implicitly assumed. We abstract here from the effects of current variables such as age, which imply that attitudes are dynamic and not static. Initially, a youth's family background--home environment, socioeconomic status, parental and religious values--determines the youth's attitudes toward women working and most likely to a broad range of traditional values. Once attitudes have been determined, the youth then proceeds to formulate, simultaneously, educational and occupational expectations.

In this context, then, estimation of traditionality as a function of family background represents the first stage of this recursive system. The two subsequent equations, in which occupational and educational expectations are each regressed on traditionality and family background, constitute reduced-form equations, since in each case the jointly-determined (and hence endogenous) dependent variable of the other equation is excluded. Clearly, one alternate estimation strategy would be to allow for the simultaneous determination of occupational and educational aspirations by using two-stage least squares to generate predicted values of each of the measures of expectations to use as explanatory variables in structural equations analyzing the determination of expectations. Since our focus is on the effects of family background and attitudes on the expectations of youth (rather than on the structure of determination of attitudes), we have opted for the simpler reduced-form approach.

A more fundamental objection to the approach used here centers on the implicit temporal ordering of the model. In particular, one might argue that it is more reasonable to regard all three dependent variables as being simultaneously determined. This view implies that using traditionality as an explanatory variable in the analysis of educational and occupational aspirations will introduce simultaneity bias into the estimated coefficients. To meet this potential objection, then, we have also analyzed the determination of fertility and educational expectations excluding traditionality as an explanatory variable. The picture becomes even more complicated if we allow for the dynamic elements in the model--e. g., one might regard traditionality, educational expectations, and occupational aspirations as being simultaneously determined initially, but then subject to change over time as youth age and experience different events.

These latter regressions, then, constitute what might be regarded as "most-reduced-form" equations, in that they would be considered as reduced-form equations under any of the conceptual models considered here. Table 11A.4, showing the results for educational expectations is presented as an example. Empirically, as one might expect, exclusion of traditionality increases the size and significance of those family background variables that are important determinants of traditionality while reducing the overall explanatory power of the estimated equations.

II. COMPARISONS OF EXPECTED FERTILITY IN THE NLS AND THE CPS[1]

The NLS results on fertility expectations collected during the first few months of 1979 contrast with those reported from the Current Population Survey (CPS) of the Bureau of Census in June of 1978. There were several differences between the NLS and the CPS in the way the data on fertility were collected. All NLS

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[1] This comparison of NLS and CPS data was drafted by Frank Mott, whose assistance is gratefully acknowledged.

Table 11A.4 Regression Results with the Traditionality Variable Excluded: Educational Attainment Expected by Youth

Independent variable	Female		Male	
	Coefficient	t-value	Coefficient	t-value
Age	0.267**	5.48	0.168**	3.22
Parental educational attainment	0.506**	7.55	0.440**	6.16
Age-parental educational attainment interaction	-0.012**	-3.35	-0.007+	-1.65
Number of siblings	-0.056**	-4.47	-0.110**	-8.04
Catholic	0.131*	2.02	-0.044	-0.64
Jewish	0.885**	3.96	0.876**	3.56
Protestant	-	-	-	-
No religion	0.125	0.84	-0.445**	-3.11
Foreign born	0.145	1.07	0.616**	4.17
Living with parents at age 14	0.179**	2.80	0.230**	3.24
Rural at age 14	-0.080	-1.22	-0.491**	-6.88
Natural log of annual church attendance	0.112**	8.96	0.149**	11.39
Ever married	-1.003**	-10.66	-0.646**	-4.07
Ever had children	-0.948**	-9.28	-0.789**	-4.38
Northeast	-	-	-	-
Norch Central	-0.178*	-2.30	-0.176*	-2.13
South	-0.026	-0.34	-0.153+	-1.77
West	0.031	0.34	-0.198*	-2.03
Black	0.687**	7.88	0.472**	4.89
Hispanic	0.568**	4.52	0.768**	5.48
White	-	-	-	-
Intercept	5.614**	6.38	7.073**	7.52
R^2 (adj)	0.278		0.284	
Number of respondents	5339		4990	

+Siginficant at the 10 percent level.

*Significant at the 5 percent level.

**Significant at the 1 percent level.

respondents were asked the battery of fertility questions. In the CPS, the questions on fertility intentions were only asked of female respondents, and not asked of never-married women below the age of 18. Fertility questions were asked only for the single informant selected for each household, and not gathered for other members of the household. These informants were, of course, not limited to the NLS age range. Overall, 14.8 percent of the 18-24 year old ever-married women and 33.8 percent of 18-24 year old single women did not report on birth expectations, a statistic sufficiently large to permit some bias in the Census results. By contrast, the response rate for the NLS data was in excess of 98 percent.

For the 18-21 year old subset which can be compared between the CPS and NLS samples, the NLS female respondents report significantly and systematically higher fertility expectations, as may be seen in Table 11A.5. Within virtually every age-race-marital status subset, respondents in the NLS sample expect a greater number of children. The differences are somewhat greater for black women (owing largely to the sizable differences for 18-19 year old single black women) and for single women. The differences between the CPS and NLS numbers are due entirely to the greater number of additional births expected in the NLS sample: there is only very limited variation between the two samples in the number of children already born.

An examination of the expected parity distributions for the NLS and CPS samples for white, black and Hispanic women shows that the major differences between the two samples are at the

Table 11A.5 Number of Lifetime Births Expected by NLS[a] and CPS Women

(Percentage distributions)

Number of lifetime births expected	18-19								20-21							
	Black		Hispanic		White		Total		Black		Hispanic		White		Total	
	CPS	NLS	CPS	NLS	CPS	NLS	CPS	NLS	CPS	NLS	CPS	NLS	CPS	NLS	CPS	NLS
0	19	8	14	2	13	7	14	7	13	5	9	2	12	6	12	6
1	23	13	14	9	10	5	12	6	21	13	20	10	12	6	13	8
2	35	42	45	48	51	50	49	48	36	45	35	47	50	56	49	54
3	17	18	13	18	17	22	17	21	21	19	23	20	18	20	18	19
4	2	13	8	16	7	12	6	13	5	13	9	15	6	8	6	10
5+	4	6	6	6	3	4	3	5	4	5	4	6	3	4	3	4
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

NOTE: CPS data from Table 4 in Fertility of American Women, June 1978, Population Characteristics, P-20, No. 341, October 1979. U.S. Bureau of the Census.

[a] NLS Universe: Female civilians age 18-21 on date of interview. (N=8,229,000)

poles of the distribution. For both 18-19 and 20-21 year olds, a much larger proportion of the CPS sample indicated that they expect to have no children. Indeed, the differences in some instances are quite striking. Among Hispanics in the CPS, 14.3 percent of the 18-19 year old and 8.6 percent of the 20-21 year old women indicated that they did not plan to have any children, compared with only 2.4 and 1.6 percent respectively among the comparable NLS Hispanic respondents. The gaps are also quite large for the white and black groups. In addition, many more CPS than NLS respondents expect to have only one child. Combining the zero and one-parity groups, fully 25 percent of CPS 18-21 year olds expect no more than one child compared with only 13.2 percent of their NLS counterparts. Conversely, a much smaller proportion of the CPS 18-21 year olds expect four or more children compared with the young women in the NLS. Once again, these differences are systematic and occur for all age and race subgroups.

In aggregate terms, then, there is a substantial difference in fertility expectations between these two nationally representative data sets. Aside from the differences in interviewing procedures, there is no ready explanation for this difference, and until such time as further investigation sheds light on the source of the difference, users of the NLS and CPS data on fertility expectations of young people would be well advised to treat these data with circumspection.

Chapter 11 Glossary

AGE
Respondent's age at date of interview; range 14-22.

AGE-PARENTAL EDUCATIONAL ATTAINMENT INTERACTION
Multiplicative interaction term.

BLACK
1 = Black, 0 = otherwise.

EVER MARRIED
Whether R is married, divorced, separated, or widowed, on interview date. 1 = ever married, 0 = never married.

FOREIGN BORN
Whether R was born outside of the U.S.; coded 1 = foreign born, 0 = born in U.S.

HISPANIC
1 = Hispanic, 0 = otherwise.

MOTHER WORKS
R's mother worked outside of home when R was 14 years old. 1 = mother worked, 0 = mother did not work.

NUMBER OF SIBLINGS
Number of brothers and sisters living with R at the time of interview; range from 0-19.

POVERTY
Whether R lives below OMBCPS definition of Poverty; 1 = below poverty, 0 = above poverty level.

PARENTAL EDUCATIONAL ATTAINMENT
Highest level of educational attainment by mother or father. This variable represents the educational attaiment of the parent with the most schooling, whether it is the mother or father. The range is 0-18.

PARENTS
Family composition at age 14; coded 1 = living with both parents, 0 = living with other family compositions.

PARENT IN 1979
Whether R was a parent in 1979; 1 = parent, 0 = otherwise.

REGION (SOUTH, WEST, NORTH CENTRAL, NORTHEAST)
Area of residence; 1 = lives in specified region, 0 = does not live in that region. NE was comparison category in regression.

RELIGION

(Catholic, Jewish, Protestant, No Religion) R's religious upbringing; coded 1 = if R has value on any of the above variables, 0 = no value. Protestant was comparison category in regressions.

RELIGIOUS ATTENDANCE

(This variable was transformed from the ordinally coded question which assessed whether R attended religious services (a) more than once a week, (b) about once a week, (c) two or three times a month, (d) about once a month, (e) several times a year or less, and (f) not at all. The ordinal values were transformed to their equivalent weekly values and the natural log was taken to result in a reasonably scaled value of church attendance.)

RURAL (FARM)

R lives on a farm or ranch; 1 = farm, 0 = otherwise.

RURAL (NONFARM)

R lives in the country but not on a farm; 1 = country, nonfarm, 0 = otherwise.

TRADITIONALITY

Summed items from Family Attitudes scale; 4 = strongly agree and 1 = strongly disagree. See Appendix.

WHITE

1 = white, 0 = otherwise.

Chapter 11 References

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CHAPTER 12

SUMMARY

by Michael E. Borus

The data collected in the 1979 National Longitudinal Survey of Youth Labor Market Experience (NLS) provide a unique description of the activities and attitudes of young people in the United States. No other data source provides the breadth of knowledge available in the NLS. In this volume, we have treated the labor market, schooling, and training experiences of young people and their attitudes and expectations for the future. This last chapter will summarize the major findings of the previous ones and present a generalized discussion of the problems youth experience in the labor market.

I. SUMMARY BY CHAPTER

Chapter 1 provided a technical description of the NLS youth sample and an overview of their demographic characteristics. Chapter 2 confirmed the findings of earlier studies which show that minorities and women are most likely to be suffering from high unemployment. Further, although there is some improvement in the unemployment situation as the youth get older, the relative position of minorities and women does not improve. Likewise, completion of high school improves the employment status of all youth, but minority graduates continue to face relatively high unemployment.

Chapter 2 also presents a comparison of the employment status reported in the NLS and in the Current Population Survey (CPS) for youth age 16-21. The NLS reported labor force participation rates which were 18 percent higher, unemployment rates 35 percent higher, and employment to population ratios 11 percent higher than those in the CPS. According to the NLS, 2.75 million more youth were in the labor force, 1.5 million employed and 1.25 unemployed. The differences were concentrated among the 16 and 17 year olds, among minority youth, and among those whose major activity in the survey week was school. The NLS indicates substantially larger problems among youth in the labor force than do the official government statistics.

The jobs held by youth are discussed in Chapter 3. Somewhat over half of all youth work part-time with nearly one-third working less than 20 hours per week. As would be expected, part-time employment is concentrated among students.

Working young women are concentrated in clerical and service occupations and to a lesser extent, sales. The young men, on the other hand, are spread among laborers, service workers, operatives and craftsmen. Female high school graduates are more likely to be clerical and service workers, and males are more likely to be craftsmen and operatives. Female school dropouts are operatives and service workers and males are operatives, laborers and craftsmen. Most youth are not provided with standard fringe benefits on their jobs--medical insurance, life insurance and paid vacations--probably because the majority are working part-time. For those who are employed 35 hours or more, the incidence of fringe benefits is much higher. Travel time to work is distinctly shorter for youth than for the total civilian labor force. Short travel times to work are particularly prevalent among the students, although almost one-half of the nonstudents travel less than 15 minutes to work. The travel time of minorities, however, tends to be longer than that for whites. Whites are more positive about the characteristics of their jobs than are minorities and are more likely to say that they like their jobs very much.

A multiple regression analysis was used to study the wage structure of employed youth. Even after taking into account demographic, human capital and environmental factors, substantial wage differences were observed along race and sex lines among those youth who were out of school. White males had average wage rates 11 percent higher than black males, and even stronger was the over 20 percent differential of males over females. The data do not indicate substantial declines in the sex differential when occupation is added to the equation, i.e., occupational segregation does not appear as important at this age as other studies have found for older workers. The difference between black and white females was not significant.

Chapter 4 investigated the patterns of youth employment during 1978. Minorities were found to have two to three times the probability of not working at all during the year and the number of weeks blacks worked was approximately one-third below that of whites, with Hispanics in an intermediate position. Even after controlling for a number of demographic and socioeconomic variables, minority youth had a probability of nonemployment five to 11 percentage points above that for whites of the same sex, and they worked an average of four to ten weeks less than the whites. In addition, youth from poverty backgrounds were more likely not to have been employed and to have worked less if employed. Further, as expected, high school dropouts worked fewer weeks than did graduates.

Whites were more likely than minorities to work at more than one job during the year. Overall almost half of white youth who were employed in 1978 held more than one job during the year. Compared with males age 24-34 when interviewed in 1976, young men 16 to 22 in this 1979 cohort were only half as likely to remain in the same jobs throughout the year, and four times as many held two or more jobs during the year. The average number of jobs left by the adult males was .26 as compared to .92 for the youth.

Chapter 5 discusses the job search of employed and unemployed youth 16 to 22. Nearly 7 million, approximately equally divided between the employed and the unemployed, were seeking new employment in the four weeks prior to the interview. In both groups approximately three-fourths were living with their parents and roughly half were enrolled in school. Among the unemployed, half were seeking work because they needed money; an additional 20 percent had lost or quit a job. Among the employed about 40 percent were seeking better pay and an additional 13 percent were seeking full-time work. Thus, economic factors appear to be the main motivation for the youth seeking new jobs.

The youth had on average been searching for work for seven to eight weeks. Surprisingly, at least half of the job seekers had used only one method of job search in the four weeks prior to the interview. Direct contact with employers was the technique most widely used by both employed and unemployed youth; it was used by 60 percent of both groups.

The next most popular job search methods were looking in the newspapers and contacting friends and relatives. The reservation wage for the jobs that the youth were seeking appear realistic, with those enrolled in school and younger youth setting their reservation wages very close to the federal minimum.

Chapter 5 also determines the willingness of youth to work at various wage rates for seven occupations. Even after taking account of human capital, family background and environmental variables, black youth are more willing to take the private sector jobs than are white youth. Other findings included sex stereotyping in the young people's choice of jobs and the willingness of substantial numbers, particularly 14-17 year olds, to work at subminimum wages.

A special analysis of male 16-19 year olds is also presented in Chapter 5 to compare their reservation wages with the wages earned by individuals with similar characteristics who are employed. It is found that about 85 percent of in-school unemployed and two thirds of out of school unemployed have reservation wages above the wages which they could expect if they were working. The wage differences are more prevalent among those who belong to the lower end of the quality scale, as measured by their knowledge of the world of work and educational attainments. Further it was found that as the difference between reservation wage and imputed wage increased, so did the probability of unemployment.

Chapter 6 deals with the formal schooling of youth. It finds substantial problems, particularly among minority youth. Whereas 15 percent of white youth 18-21 years old fail to finish high school, 25 percent of black youth and 35 percent of Hispanic youth fail to do so. Children from poor families are almost four times as likely to drop out of school as the nonpoor. Multivariate analysis indicated that socioeconomic background and not race was the determining factor. Likewise, the choice of curricula was dependent upon socioeconomic level, with the poor less likely to be in college preparatory programs and more likely to be in vocational programs. Another influence of socioeconomic background is shown by the four times greater likelihood of students from poverty families being behind two or more years in school.

On the other hand, the percentage of youth expressing overall satisfaction with their school was high and did not vary substantially by race or sex. The proportion of high school graduates who go on to college varies little by race or sex. Poverty status at the time of the interview does not appear as a barrier to college attendance, and minority youth with the same socioeconomic backgrounds have equal or greater likelihood of attending college as white youth.

Another form of training, that provided by the Department of

Labor under the Comprehensive Employment and Training Act and WIN programs, is the subject of Chapter 7. Overall, 7 percent of youth had participated in such programs between January 1, 1978 and the time they were interviewed in 1979. An additional 6 percent had participated prior to 1978. Blacks are particularly likely to participate in government employment and training programs; by the time they left adolescence, 42 percent of the black population had participated in some sort of government program. Hispanics also have higher than average participation rates.

The youth enter these government programs for a variety of reasons. Youth enrolled in school, who were primarily in subsidized employment programs, participate for the income, but those youth who are out of school appear to be more interested in training. The subjective responses of youth indicate that by and large they are being helped by the services they receive in these programs. A major problem, however, appears to be the segregation by sex in the occupations for which employment and training are provided.

Chapter 8 studies the participation of youth in vocational training after they have left high school. Among the more important findings are lower participation for minorities, particularly males, and school dropouts. Again, there is substantial sex segregation in the occupations for which young people are being trained. Craft and operative training are almost exclusively male, while clerical and service training are predominantly female.

Chapter 9 finds that only 6 percent of the civilian youth 14 and 22 reported a health disability which either prevented or restricted the type or amount of work they could do. One sixth of these were pregnancy related and one-fourth resulted from accidents or injuries. Of the remaining health problems, respiratory ailments made up the largest single group.

Perceptions of discrimination and other barriers to employment are the presented in Chapter 10. The most prevalent problem is age discrimination, mentioned by 45 percent of the 16 to 22 year old youth. This perception was inversely related to age and was somewhat higher among females and minorities. Approximately 1 in 5 blacks and Hispanics reported racial or ethnic discrimination. Poor minorities are more likely to perceive themselves as being victimized by race or nationality discrimination. In addition, perceptions of race and nationality discrimination increase with age.

Sex discrimination was mentioned by about 14 percent of the young women, with minorities more likely to perceive sex discrimination than whites. A major barrier to employment as perceived by the young people is lack of transportation, cited by 30 percent of the youth and by higher percentages of minorities, school dropouts and those in poverty. Other problem areas were lack of experience (13 percent of respondents), education (6 percent) and problems with English among the Hispanic youth (18 percent).

Chapter 11 treats the educational and occupational aspirations and expectations of young people and their plans for family. Educational aspirations and expectations appear to be directly related to the homes from which the young people come. Lower parental education, greater number of siblings, rural backgrounds, early marriage and traditional attitudes toward the role of women are all associated with lower educational expectations. When these factors are controlled along with others, it is found that minorities expect higher education than do whites. However, since minorities have greater incidence of disadvantaged family backgrounds, our estimates imply that intergenerational transmission of that inequality will continue. Further, it is found that desire for additional vocational training outside of school is not related to family background and thus is unlikely to overcome the lower educational expectations of youth from disadvantaged homes.

When asked about their plans for age 35, seven-eighths of the men and two-thirds of the women said they aspired to a specific occupation. Only one-fourth of the women expected not to have paid employment, in sharp contrast to data gathered in 1968 from women of the same age. At that time 63 percent did not expect to be in the labor market when they reached age 35. Young women in 1979 had less traditional and higher occupational aspirations than their work oriented counterparts of the late 1960s. Finally, the expected fertility for young women aged 17-22 in 1979 showed a decline from 1971 NLS data from 2.7 to 2.4 children. Overall young men expected to have the same number of children as the young women. The determinants of expected number of children included the youth's number of siblings, attitudes toward the role of women, religion, and age.

II. DISCUSSION OF YOUTH AND THE LABOR MARKET

The NLS leads to several general observations about youth employment problems and the way to deal with the problems. The findings of this first survey put to rest the myth that young Americans are not interested in work. More than half of these young persons were either working or looking for work. About 4 out of 5 of these youth would continue to work even if they were economically well off. Approximately 14 million of the youth 16-21 had jobs and 3.3 million were looking for work during the Spring of 1979. Apparently the desire to work begins at a very early age. About 1.8 million 14 to 15 year old youngsters were already working at the time of this survey.

One in four young persons age 16-20 at the beginning of 1978 worked all of that year, and over 40 percent were employed more than three-fourths of the year. The majority of employed youth, however, normally work at part-time jobs; nearly a third of the total sample were employed fewer than twenty hours per week when interviewed. This is due to the fact that many young persons carry both school and work responsibilities. Of youth 16-21, six out of ten of the high school students were in the labor force; but one fourth of them could not find jobs. Half of the white high school students had jobs compared with only a quarter of the black students.

Since work is important to youth, youth unemployment is a major problem. The NLS finds that the vast majority of youth age

16-21, both those in school and out, wish to work. The majority of young people seek only part-time employment, are enrolled in school, and are living with their parents, thus their hardship in being unemployed is reduced; but there are also 1.5 million unemployed youth who are out of school, 1.5 million who seek full-time employment, 400 thousand have children, and 800 thousand come from poverty homes.

Further, the NLS suggests that youth unemployment may be a greater problem than previously thought. NLS findings cast some doubt on the accuracy of the Current Population Survey (CPS) statistics on youth. Substantial differences appear between the NLS and the CPS for teenagers.

Among the factors which may account for high levels of youth unemployment is the lack of knowledge of the world of work held by many young people, particularly minorities and those from poverty backgrounds. The NLS also finds that young people use very few job search methods in looking for work and they may also need more realistic information regarding market wages so that they adjust their wage expectations to wage offers of employers.

Another barrier to employment found in the NLS is a lack of transportation, although youth tend to work closer to home than adults. Thirty percent of all youth age 16-21 said that transportation difficulties caused them problems in getting a good job.

Minorities suffer from discrimination in the labor market. About one in five black and Hispanic youth ages 16 to 22 felt discrimination by race or nationality to have caused employment problems. Youth from poverty households are significantly more likely to perceive themselves as having been adversely affected by racial, nationality or sexual discrimination. Despite this country's efforts to reduce or eliminate labor market discrimination based on race or nationality, a substantial proportion of minority youth, on the threshold of their adult working lives, feel directly affected by the problem. Indeed, minority youth are found to have less employment and lower wage rates when employed than can be accounted for on the basis of their education, training, and family backgrounds, i.e., discrimination is present. This current discrimination added to the results of past discrimination (as evidenced by higher school dropout rates, lower family incomes, less knowledge of the world of work, and housing segregation) suggests that inequality of opportunity will continue.

The NLS data show that the problems of minority youth are not due to negative feelings or to lack of effort on the part of the youth themselves. Minorities are shown to have equal aspirations for education, to be more willing to work at private sector jobs at given wage rates, and to be seeking employment as conscientiously as white youth. The difference appears to be that the labor market discounts their contribution because of race or ethnic background.

Discrimination and segregation on the basis of sex is also apparent. The NLS found higher unemployment rates among young women than among comparable young men and substantial differences in the wages paid to young women. In the past, such differences have been rationalized on the basis that young women are only temporarily in the labor force and have not prepared themselves adequately for paid employment because of their limited labor force attachment. The NLS shows, however, that young women have equal aspirations in the areas of education and training, and most expect to be employed as adults.

The major problem today appears to be occupational segregation of young women--in school curriculum, in type of training and employment provided by government programs, and in post-secondary school vocational training. Young women are concentrated in the traditional female occupations where the pay is lower. Whether this segregation is by choice or due to discrimination is not clear from these data. Sex stereotyping appears to be internalized by those women who are more willing to work in supermarkets than in factories. On the other hand, government employment and training programs which would presumably have the option of assigning young women to nontraditional occupations do not do so even though young women today are much less traditional than were their counterparts in the late 1960s.

Age is perceived as a major barrier to employment. Fifty-two percent of 16-19 year olds feel that they have been kept from a good job because of their age. The NLS also finds that a disproportionately large group, 23 percent, in this age range are unemployed. Whether the perceptions of these youth constitute an important problem is not clear. Since almost all are enrolled in school and living with their parents, the issue may not be one of economic hardship. For the youth themselves, however, age discrimination is perceived as a real problem.

NLS evidence indicates that many young people would be willing to accept work at less than the present minimum. The probable effects of such a two-tiered minimum wage on the division of jobs between youth and adults and among youth, and the question as to whether low income young people would benefit, cannot be ascertained from our data.

More than one in ten youth age 14-21 was a high school dropout in 1979. The NLS data indicate that dropping out of school is a particular problem for minorities, especially Hispanic youth. Forty percent of Hispanic dropouts had left school because of economic reasons, home responsibilities, good job offers or financial difficulties. The socioeconomic background of the students accounts for virtually all the racial differences in dropout rates.

Many young persons--particularly black young men--who drop out of school immediately begin to have employment problems which persist through most of their working lives. Nearly seven out of ten white and Hispanic male high school dropouts age 16 to 21 held jobs in the Spring of 1979 compared with only 55 percent of the black dropouts. Dropouts were about two and a half times more likely than graduates not to have worked in 1978. Female dropouts were less likely to be employed or looking for work than males. Unemployment was a problem for younger females, regardless of school enrollment. But it was especially prevalent for dropouts. While dropping out of school is associated with higher unemployment, it is also true that when dropouts do find employment, they have lower wages, higher turnover, fewer fringe benefits, and lower job satisfaction.

What was characterized as "Social Dynamite" in the 1960s is apparently still with us. We have a significant number of young persons in our society who are not working, not looking for work and not attending school. Some 1.8 million persons between the ages of 16 to 21 fit in this category. Although most of these young persons were females with family responsibilities, we had some 400,000 young men who were not participating in the labor force or getting any schooling.

Department of Labor employment and training programs appear to serve the clientele for which they were designed and to overcome some of the barriers to youth employment. By the time they leave adolescence, a full 42 percent of the black youth population has participated in some sort of government program. Although the long-run consequences of participation in employment and training programs must wait until further longitudinal data are available, the clients of these programs, disadvantaged youth with large proportions of minorities, appear to be receiving services which will improve their labor market situations. The young people themselves judge the programs worthwhile. In those cases where the youth were subsequently employed, they used skills learned in the programs on their jobs. The vast majority of participants expressed satisfaction with their experiences and felt participation had improved their chances of getting and keeping good employment.

1979 Youth Survey Questionnaire

C

Case #
Label: ______________________

NORC-4270
1/79

OMB
44 R-1671

NATIONAL OPINION RESEARCH CENTER
University of Chicago

CENTER FOR HUMAN RESOURCE RESEARCH
Ohio State University

National Longitudinal Survey of Labor Force Behavior

Youth Survey, 1979

Introduction for Youth Survey Questionnaire:

Hello, I'm (NAME) from the National Opinion Reserch Center at the University of Chicago. As you may remember, a few months ago one of our representatives came to ask some questions about your household. After that interview, you were selected by chance to be a respondent for a survey of young people that we are conducting for the Department of Labor under the Youth Employment and Demonstration Projects Act of 1977. This survey is being done in this area and in many other areas in the country. The purpose of the survey is to collect and analyze information on the education, training, and work experience of youth in order to help solve youth's employment and unemployment problems. I would appreciate it very much if you would take some time to answer some questions about yourself, mainly about your schooling and work. We will pay you $5 for your time.

Your participation in this survey is completely voluntary. Failure to respond will not have any effect on rights, benefits, and privileges under Federal programs. All the information you give will be protected under the Privacy Act of 1974. This means that your answers will be kept strictly confidental. Results of the study will be made public only in summary or statistical form so that individuals who participate cannot be identified.

NOTICE: ALL INFORMATION THAT WOULD PERMIT IDENTIFICATION OF RESPONDENTS OR THEIR HOUSEHOLDS WILL BE REGARDED AS STRICTLY CONFIDENTIAL, WILL BE USED ONLY FOR THE PURPOSES OF THE STUDY AND WILL NOT BE DISCLOSED OR RELEASED FOR ANY OTHER PURPOSE WITHOUT PRIOR CONSENT, EXCEPT AS REQUIRED BY LAW.

ENTER TIME BEGAN ________ AM / PM

SECTION I ON FAMILY BACKGROUND

We would like to begin the interview by asking you a few questions about your family background.

1. A. First, when were you born?

MONTH	|__|__|
DAY	|__|__|
YEAR 19	|__|__|

B. And that makes you (R'S AGE ON HH ENUMERATION). Is that correct? (IF NECESSARY CORRECT HH ENUM.)

ENTER R'S AGE \|__\|__\|

2. A. In what country were you born?

IN THE UNITED STATES . . . . (ASK B)..........	1
IN SOME OTHER COUNTRY .(SPECIFY AND GO TO Q. 3) ____________________	2

IF IN THE UNITED STATES, ASK B:

B. And where in the United States were you born?

RECORD TOWN OR CITY ____________________

(IF NO TOWN OR CITY, RECORD COUNTY HERE: ____________________)

RECORD STATE: ____________________

3. When you were a child, was any language, other than English, spoken in your home?

Yes . . (ASK A)	1
No . . (GO TO Q. 4). . .	2

A. What language was that?
RECORD VERBATIM AND CODE ONE ONLY.

____

SPANISH	1
FRENCH	2
GERMAN	3
OTHER .(SPECIFY) ____________________	4

4. INTERVIEWER, SEE HOUSEHOLD ENUMERATION. WHAT IS THE AGE OF THE RESPONDENT?

14 YEARS OLD	1
15-21 YEARS OLD	2

5. (IF R IS 14 YEARS OLD, CODE Q. 5 WITHOUT ASKING.) Now let's talk about when you were 14 years of age. Where were you living then? IF MORE THAN ONE PLACE, PROBE FOR THE PLACE RESPONDENT THE LONGEST WHILE AGE 14.

IN THE UNITED STATES . (PROBE FOR AND RECORD BELOW CITY AND STATE) 1

TOWN OR CITY: ____________________

(IF NO TOWN OR CITY, RECORD COUNTY HERE: ____________________)

STATE: ____________________

OTHER COUNTRY . . (PROBE FOR AND RECORD BELOW NAME OF COUNTRY) 2

COUNTRY: ____________________

6. HAND CARD A. Which of the categories on this card best describes where you (are/were) living (when you were 14 years old)?

In a town or city	1
In the country, but not on a farm or ranch	2
On a farm or ranch	3

7. HAND CARD B. PLease take a look at this card and tell me with whom you (are/were) living (when you were 14 years old). CODE ONE CATEGORY FOR "ADULT WOMAN" AND ONE CATEGORY FOR "ADULT MAN". PROBE IF NECESSARY: And which letter in box (1 or 2) best describes who you (are/were) living with (then)?

		ADULT WOMAN	
CODE SMALLEST # MENTIONED	BOX # 1	A) Mother . . (ASK Q. 9)	01
		B) Step-mother . (ASK Q. 9)	02
		C) Some other adult woman relative(ASK Q.8)	03
		D) Some other adult woman . (ASK Q.8)	04
		E) No adult woman	05

		ADULT MAN	
CODE SMALLEST # MENTIONED	BOX # 2	F) Father . . .(ASK Q.11)	10
		G) Step-father . . . .(ASK Q.11)	20
		H) Some other adult man relative (ASK Q.10)	30
		I) Some other adult man . . . .(ASK Q.10)	40
		J) No adult man	50

K) SOME OTHER ARRANGEMENT (ASK Q.12)	80
L) ON MY OWN . . (ASK Q.12)	90

IF CODE 03 OR 04 IN Q.7 ASK Q.8.

8. Who (is/was) the adult woman (relative) you live(d) with (when you were 14 years old)--what is her relationship to you? RECORD VERBATIM.

____

IF CODE 01,02,03, OR 04 IN Q.7, ASK Q. 9.

9. (When you were 14 years old,) (Does/did) your (mother/stepmother/PERSON IN Q.8) work for pay?

Yes . . . . (ASK A & B) 1
No . . . . .(GO TO Q. 10). 2

IF YES, ASK A & B.

A. What kind of work (does/did) she do? RECORD VERBATIM.

____

OR

DON'T KNOW . . . (GO TO Q. 10) 998

B. What (are/were) some of her main activities or duties? PROBE FOR TWO MAIN ACTIVITIES AND RECORD VERBATIM.

____

____

____

____

IF CODE 30 OR 40 IN Q.7, ASK Q.10.

10. Who was the adult man (relative) you live(d) with (when you were 14 years old)--what is his relationship to you? RECORD VERBATIM.

____

____

IF CODE 10, 20, 30, OR 40 IN Q.7, ASK Q.11.

11. (When you were 14 years old,) (Does/did) your (father/stepfather/PERSON IN Q.10) work for pay?

Yes . . . . (ASK A & B) 1
No . . . . .(GO TO Q. 13). 2

IF YES, ASK A & B.

A. What kind of work (does/did) he do? RECORD VERBATIM.

____

OR

DON'T KNOW . . . . (GO TO Q. 13) 998

B. What (are/were) some of his main activities or duties? PROBE FOR TWO MAIN ACTIVITIES AND RECORD VERBATIM.

____

____

____

____

NOW SKIP TO Q. 13.

IF CODE 80 OR 90 IN Q.7 OR IF BOTH 05 AND 50 ARE CODED IN Q. 7, ASK Q. 12.

12. With whom (are/were) you living (when you were 14 years old)? RECORD VERBATIM.

____

13.A. (When you were about 14 years old),(Do/did) you or anyone else living with you get any magazines regularly?

Yes	1
No	2

B. (Do/Did) you or anyone else living with you get a newspaper regularly?

Yes	1
No	2

C. (At the present time/When you were about 14 years old), (do/did) you or anyone else living with you have a library card?

Yes	1
No	2

SEC 01

14. Some people live in the same place all of their lives, while others move from time to time. How about you—have you lived here in this (city/town/county) all of your life?

Yes ....(GO TO Q. 15)........ 1

No ....(ASK A)................ 2

A. <u>IF NO</u>: When did you last move to this (city/town/county)--during what year?

```
                 |--|--|
YEAR    19       |__|__|
```

B. <u>INTERVIEWER</u>: IS DATE IN A

BEFORE 1978, OR . . . . (GO TO Q. 15) . . . 1

DURING 1978 OR 1979? . . . (ASK C-E). . . . 2

<u>IF CODE 2 IN B, ASK C-F</u>:

C. In what month did you move to this (city/town/county)?

```
                 |--|--|
ENTER MONTH      |__|__|
```

D. Where did you live <u>just before</u> moving to this (city/town/county)?

IN THE UNITED STATES . (PROBE FOR AND RECORD BELOW CITY AND STATE) 1

TOWN OR CITY: ________________

(IF NO TOWN OR CITY, RECORD COUNTY HERE: ________________)

STATE: ____________________

OTHER COUNTRY . . (PROBE FOR AND RECORD BELOW NAME OF COUNTRY) 2

COUNTRY: ____________________

E. When did you last move to (PLACE RECORDED IN D ABOVE)?

```
                  |--|--|
ENTER MONTH       |__|__|
                  |--|--|
AND YEAR:   19    |__|__|
```

F. <u>INTERVIEWER</u>: IS DATE IN E

BEFORE 1978, OR . . . . (GO TO Q. 15) . . . 1

DURING 1978 OR 1979? . . . (ASK G). 2

IF CODE 2 IN F, ASK G:

G. You said that you last moved to (PLACE IN D) on (DATE IN E). Please give me a list of all the places you lived before that, going back to Jan. 1 of 1978.
ENTER PLACES BELOW IN (1).

FOR EACH PLACE IN (1), ASK (2): When did you last move to [PLACE IN (1)]?
RECORD DATES IN (2) BELOW.

IF DATE IN (2) IS AFTER JAN. 1, 1978, REASK:
And where did you live just before moving to [PLACE LAST LISTED IN (1)]?

CONTINUE ASKING (1) AND (2) UNTIL LAST DATE IN (2) IS PRIOR TO JAN. 1, 1978.

(1) PLACES (LIST TOWN/CITY OR COUNTY AND STATE OR COUNTRY)	(2) DATES	
________________________________	|__|__| MONTH	|__|__| YEAR
________________________________	|__|__| MONTH	|__|__| YEAR
________________________________	|__|__| MONTH	|__|__| YEAR
________________________________	|__|__| MONTH	|__|__| YEAR

15. Now we have a few questions about your family. First, where was your mother born?

IN THE UNITED STATES . (PROBE FOR STATE, RECORD BELOW, AND GO TO Q.16). . . 1

STATE: ____________________

OTHER COUNTRY . . (PROBE FOR NAME OF COUNTRY, RECORD BELOW, AND GO TO Q.16). . 2

COUNTRY: ____________________

IF VOLUNTEERED:
HAVE NEVER KNOWN MY MOTHER ...(ANSWER A)..3

A. IF CODE 3, INTERVIEWER: IS R'S STEP-MOTHER LISTED ON HOUSEHOLD ENUMERATION?

YES .....(SKIP TO Q. 19)................ 1

NO ......(SKIP TO Q. 21)................ 2

16. What was the highest grade or year of regular school that your mother ever completed? CIRCLE ONE CODE BELOW.

NONE..........00
1ST GRADE.....01
2ND GRADE.....02
3RD GRADE.....03
4TH GRADE.....04
5TH GRADE.....05
6TH GRADE.....06
7TH GRADE.....07
8TH GRADE.....08
9TH GRADE.....09
10TH GRADE....10
11TH GRADE....11
12TH GRADE....12

1ST YEAR OF COLLEGE...13
2ND YEAR OF COLLEGE...14
3RD YEAR OF COLLEGE...15
4TH YEAR OF COLLEGE...16
5TH YEAR OF COLLEGE...17
6TH YEAR OF COLLEGE...18
7TH YEAR OF COLLEGE...19
8TH YEAR OF COLLEGE...20

17. INTERVIEWER, SEE HOUSEHOLD ENUMERATION.
IS R's MOTHER OR STEP-MOTHER LISTED THERE?

YES ....(SKIP TO Q. 19)........ 1
NO 2

18. Is your mother living at this time?

Yes 1
No ....(SKIP TO Q. 21)........ 2

19. Last year, that is, during 1978, did your (mother/step-mother) work for pay all of the year, part of the year, or not at all?

All of the year (ASK A-C) 1
Part of the year (ASK A-C) 2
Not at all . . . (GO TO Q. 20) 3
DON'T KNOW . . . (GO TO Q. 20) 8

IF ALL OR PART OF THE YEAR, ASK A - C:

A. What kind of work was she doing? IF MORE THAN ONE KIND OF WORK PROBE: During 1978, what kind of work did she do the longest?

RECORD VERBATIM: ______________________________

B. What were some of her main activities or duties? PROBE FOR TWO MAIN DUTIES AND RECORD VERBATIM.

____

____

____

____

C. In the weeks that your (mother/step-mother) worked, how many hours per week did she work--35 hours or more or less than 35 hours?

35 hours or more 1
Less than 35 hours 2
DON'T KNOW 8

20. **INTERVIEWER:** DOES R LIVE SEPARATELY FROM HIS/HER (MOTHER/ STEP-MOTHER)?

YES ....(ASK A).................... 1
NO ....(GO TO Q. 21)............. 2

IF R IS IN MILITARY OVERSEAS, DO NOT ASK A.

A. IF YES: How many miles away from here does your mother live?

ENTER # OF MILES |_|_| , |_|_|_|

21. Where was your father born?

IN THE UNITED STATES . (PROBE FOR STATE, RECORD BELOW, AND GO TO Q.22). . . 1

STATE: ______________________

OTHER COUNTRY . . (PROBE FOR NAME OF COUNTRY, RECORD BELOW, AND GO TO Q.22). . 2

COUNTRY: ______________________

IF VOLUNTEERED:
HAVE NEVER KNOWN MY FATHER ..(ANSWER A).. 3

A. **INTERVIEWER**: IF CODE 3, IS R'S STEP-FATHER LISTED ON HOUSEHOLD ENUMERATION?

YES .....(SKIP TO Q. 26)................ 1
NO ......(SKIP TO Q. 28)................ 2

22. And where was your father's father born-- in the United States or some other country?

In the United States 1

In some other country
(SPECIFY) ______________________ 2

DON'T KNOW 8

23. Let's go back to your father now. What was the highest grade or year of regular school that your father ever completed? CIRCLE ONE CODE BELOW.

NONE..........00
1ST GRADE.....01
2ND GRADE.....02
3RD GRADE.....03
4TH GRADE.....04
5TH GRADE.....05
6TH GRADE.....06
7TH GRADE.....07
8TH GRADE.....08
9TH GRADE.....09
10TH GRADE....10
11TH GRADE....11
12TH GRADE....12

1ST YEAR OF COLLEGE...13
2ND YEAR OF COLLEGE...14
3RD YEAR OF COLLEGE...15
4TH YEAR OF COLLEGE...16
5TH YEAR OF COLLEGE...17
6TH YEAR OF COLLEGE...18
7TH YEAR OF COLLEGE...19
8TH YEAR OF COLLEGE...20

24. INTERVIEWER, SEE HOUSEHOLD ENUMERATION.
IS R's FATHER OR STEP-FATHER LISTED THERE?

YES ....(SKIP TO Q. 26)........ 1

NO 2

25. Is your father living at this time?

Yes 1

No ....(SKIP TO Q. 28)........ 2

26. Last year, that is, during 1978, did your (father/step-father) work for pay all of the year, part of the year, or not at all?

All of the year (ASK A-C) 1
Part of the year (ASK A-C) 2
Not at all . . . (GO TO Q. 27) 3
DON'T KNOW . . . (GO TO Q. 27) 8

IF ALL OR PART OF THE YEAR, ASK A - C:

A. What kind of work was he doing? IF MORE THAN ONE KIND OF WORK PROBE: During 1978, what kind of work did he do the longest?

RECORD VERBATIM: ______________________________

B. What were some of his main activities or duties? PROBE FOR TWO MAIN DUTIES AND RECORD VERBATIM.

____

____

____

____

C. In the weeks that your (father/step-father) worked, how many hours per week did he work--35 hours or more or less than 35 hours?

35 hours or more 1

Less than 35 hours 2

DON'T KNOW 8

27. INTERVIEWER: DOES R LIVE SEPARATELY FROM HIS/HER FATHER OR STEP-FATHER?

YES ....(ANSWER A)................ 1

NO ....(GO TO Q. 28)............. 2

A. IF YES: INTERVIEWER, CODE ONE:
DID YOU DO A HOUSEHOLD ENUMERATION FOR THIS RESPONDENT ON A VERSION A, VERSION B, OR VERSION C?

VERSION A ....(GO TO D) 1

VERSION B ....(ANSWER B).............2

VERSION C ....(GO TO C) 3

B. IF VERSION B: INTERVIEWER, WHO IS LISTED ON THE HOUSEHOLD ENUMERATION, VERSION B?

R'S (MOTHER/STEP-MOTHER) AND R'S (FATHER/STEP-FATHER) ..(GO TO Q. 28).. 1

R'S (MOTHER/STEP-MOTHER)..(GO TO D)..... 2

R'S (FATHER/STEP-FATHER)..(GO TO D)..... 3

NEITHER 4

C. Do your mother and father live in the same household?

Yes ....(GO TO Q. 28).............. 1
No 2

IF R IS IN MILITARY OVERSEAS, DO NOT ASK D.
D. How many miles away from here does your father live?

ENTER # OF MILES |__|__| , |__|__|__|

28. We would like to ask you a few questions about any brothers and sisters you may have.

A. How many (living) brothers and sisters do you have?
(IF R IS NOT SURE WHO TO CONSIDER AS BROTHERS OR SISTERS, CIRCLE CODE HERE AND SAY: Please think of whomever you consider as your brothers and sisters.) 1

ENTER NUMBER |__|__|
OR
NONE (SKIP TO Q. 30)..... 00

B. How many of them are currently attending or enrolled in regular school?

ENTER NUMBER |__|__|
OR
NONE 00

C. How many of your brothers and sisters are older than you?

ENTER NUMBER |__|__|
OR
NONE (SKIP TO Q. 30).........00

29. A. How old is your oldest (living) brother or sister?

ENTER AGE |__|__|

B. What is the highest grade or year of regular school that (he/she) has ever completed?
CIRCLE ONE CODE BELOW

NONE.............00
1ST GRADE........01
2ND GRADE........02
3RD GRADE........03
4TH GRADE........04
5TH GRADE........05
6TH GRADE........06
7TH GRADE........07
8TH GRADE........08
9TH GRADE........09
10TH GRADE.......10
11TH GRADE.......11
12TH GRADE.......12

1ST YEAR OF COLLEGE...13
2ND YEAR OF COLLEGE...14
3RD YEAR OF COLLEGE...15
4TH YEAR OF COLLEGE...16
5TH YEAR OF COLLEGE...17
6TH YEAR OF COLLEGE...18
7TH YEAR OF COLLEGE...19
8TH YEAR OF COLLEGE...20

30. HAND CARD C. What is your origin or descent? CODE ALL THAT APPLY.

Black, Afro-American, or Negro	01
Chinese	02
English	03
Filipino or Philipino	04
French	05
German	06
Greek	07
Hawaiian or Pacific Islander	08
Indian-American, or Native American	09
Indian-Asian	10
Irish	11
Italian	12
Japanese	13
Korean	14
Latino or Spanish Descent	
Cuban or Cubano	15
Chicano	16
Mexican or Mexicano	17
Mexican-American	18
Puerto Rican, Puertorriqueno, or Borincano	19
Other Latino, Hispano, or Latin-American Descent	20
Other Spanish Descent	21
Polish	22
Portuguese	23
Russian	24
Scottish	25
Vietnamese	26
Welsh	27
Other (SPECIFY) ______________________	28
IF VOLUNTEERED: American	29
OR	
NONE	00

IF MORE THAN ONE CODED IN Q.30, ASK Q.31.

31. You said that your origin or descent was (READ CATEGORIES CODED IN Q. 30). Which one of these do you feel closest to?

ENTER CODE |__|__|

And now a few questions about your religious background.

32. First, in what religion were you raised? RECORD VERBATIM AND CODE ONE ONLY. IF "PROTESTANT" OR "CHRISTIAN", PROBE: What denomination was that, if any?

____

____

PROTESTANT, "CHRISTIAN", NO DENOMINATION KNOWN, OR NON-DENOMINATIONAL CHURCH	001
BAPTIST	002
EPISCOPALIAN	003
LUTHERAN	004
METHODIST	005
PRESBYTERIAN	006
ROMAN CATHOLIC	007
JEWISH	008
OTHER (SPECIFY) ______________________	009
OR	
NONE, NO RELIGION	000

33. What is your present religion, if any? RECORD VERBATIM AND CODE ONE ONLY. IF "PROTESTANT" OR "CHRISTIAN", PROBE: What denomination is that, if any?

____

____

PROTESTANT, "CHRISTIAN", NO DENOMINATION KNOWN, OR NON-DENOMINATIONAL CHURCH	001
BAPTIST	002
EPISCOPALIAN	003
LUTHERAN	004
METHODIST	005
PRESBYTERIAN	006
ROMAN CATHOLIC	007
JEWISH	008
OTHER (SPECIFY) ________________	009
OR	
NONE, NO RELIGION	000

34. HAND CARD D. In the past year, about how often have you attended religious services -- more than once a week, about once a week, two or three times a month, about once a month, several times or less during the year, or not at all?

More than once a week	6
About once a week	5
Two or three times a month	4
About once a month	3
Several times a year or less	2
Not at all	1

SECTION 2 ON MARITAL HISTORY

1) Are you presently married, widowed, divorced, separated, or have you never been married?

Presently married	1
Widowed	2
Divorced	3
Separated	4
Never married--including annulments . . . .(SKIP TO SECTION 3)	5

2) (Including your present marriage,) how many times, altogether, have you ever been married?

ENTER NUMBER |__|__|

ASK ONLY IF TWO OR MORE IN Q.2, OTHERS GO TO Q.4:

3) A. What was the date of your first marriage?

ENTER MONTH |__|__|
AND YEAR: 19 |__|__|

B. And during what month and year did your first marriage end?

ENTER MONTH |__|__|
AND YEAR: 19 |__|__|

(IN Q.4-9, READ THE PHRASE "MOST RECENT" IN PARENTHESIS.)

4) What was the date of your (most recent) marriage?

ENTER MONTH |__|__|
AND YEAR: 19 |__|__|

5) When was your (most recent)(husband/wife) born?

ENTER MONTH |__|__|
AND YEAR: 19 |__|__|

6) INTERVIEWER, SEE Q.1 AND CODE BELOW:

R IS PRESENTLY MARRIED OR WIDOWED . (GO TO Q.7) 1

R IS DIVORCED OR SEPARATED, [READ: "At the time of your (divorce/separation,)" AND GO TO Q.7]. 2

7) What was the highest grade of regular school--that is, elementary school, high school, college, or graduate school--that your (most recent)(husband/wife) ever completed? CIRCLE ONE CODE BELOW.

NONE..........00
1ST GRADE.....01
2ND GRADE.....02
3RD GRADE.....03
4TH GRADE.....04
5TH GRADE.....05
6TH GRADE.....06
7TH GRADE.....07
8TH GRADE.....08
9TH GRADE.....09
10TH GRADE....10
11TH GRADE....11
12TH GRADE....12

1ST YEAR OF COLLEGE...13
2ND YEAR OF COLLEGE...14
3RD YEAR OF COLLEGE...15
4TH YEAR OF COLLEGE...16
5TH YEAR OF COLLEGE...17
6TH YEAR OF COLLEGE...18
7TH YEAR OF COLLEGE...19
8TH YEAR OF COLLEGE...20

8) INTERVIEWER, SEE Q.1 AND CODE ONE BELOW:

R IS PRESENTLY MARRIED [READ: "During 1978" AND GO ON TO Q.9]. . . 1

R IS PRESENTLY WIDOWED [READ: "During the last year (he/she) worked" AND GO TO Q.9]. 2

R IS DIVORCED OR SEPARATED [READ: "During the last year you were (married to/living with) (him/her)" AND GO ON TO Q.9] 3

9) A. What kind of work did your (most recent)(husband/wife) do? RECORD VERBATIM.
IF MORE THAN ONE OCCUPATION, PROBE FOR AND RECORD WORK DONE THE LONGEST DURING THAT PERIOD.

____

PROBE: What were (his/her) main activities or duties?
PROBE FOR TWO MAIN DUTIES, RECORD VERBATIM, AND GO TO Q.10.

____

____

____

____

OR
DID NOT WORK DURING
THAT PERIOD .....(ASK B) 995
OR
DON'T KNOW ....(GO TO Q. 10)......... 998

B. IF DID NOT WORK DURING THAT PERIOD, ASK: What kind of work (does/did) (he/she) usually do? RECORD VERBATIM.

____

PROBE: What were (his/her) main activities or duties? PROBE FOR TWO MAIN DUTIES AND RECORD VERBATIM.

____

____

____

____

OR

NEVER WORKED 995

```
|-------------------|
| NOW SKIP TO Q. 11 |
|___________________|
```

10. INTERVIEWER, SEE Q. 1 AND CODE BELOW:

R IS PRESENTLY MARRIED . . . (ASK A & B) . 1

ALL OTHERS . . . . (GO TO Q. 11) . . 2

IF R IS PRESENTLY MARRIED, ASK A & B:

A. During 1978, how many weeks did your (husband/wife) work at all jobs, either full- or part-time, not counting work around the house?

```
                      |--|--|
ENTER # OF WEEKS      |__|__|
```

B. In the weeks your (husband/wife) worked, how many hours did (he/she) usually work per week?

```
                      |--|--|
ENTER # OF HOURS      |__|__|
```

11) INTERVIEWER: WAS ANSWER IN Q. 1 CODED

PRESENTLY MARRIED,(SKIP TO SECTION 3) . 1
WIDOWED, . (ASK Q.12) 2
DIVORCED, OR . (ASK Q.13). 3
SEPARATED? (ASK Q.14) 4

ASK Q.12 IF WIDOWED:

12) During what month and year did your (husband/wife) die?

```
                     |--|--|
ENTER MONTH          |__|__|
                     |--|--| NOW SKIP TO
AND YEAR:   19       |__|__| SECTION 3
```

ASK Q.13 IF DIVORCED:

13) When did your (most recent) marriage end, that is, during what month and year did the divorce become final?

```
                                   |--|--|
              ENTER MONTH          |__|__|
                                   |--|--| NOW SKIP TO
              AND YEAR:  19        |__|__| SECTION 3
```

ASK Q.14 IF SEPARATED:

14) When did your present separation begin, that is, during what month and year did you stop living together?

```
                                   |--|--|
              ENTER MONTH          |__|__|
                                   |--|--|
              AND YEAR:  19        |__|__|
```

SECTION 3 ON FERTILITY

SEC 03

Now I'd like to ask you your opinions and expectations about family size.

1) A. First, what do you think is the ideal number of children for a family?

ENTER # OF CHILDREN |__|__|

B. How many children do you want to have?

ENTER # OF CHILDREN |__|__|

2) Have you ever had any children?

Yes ....(ASK A)............. 1
No ....(GO TO Q. 3).......... 2

IF YES, ASK A & B:
A. How many children, altogether, have
IF FEMALE RESPONDENT: you ever given birth to
IF MALE RESPONDENT: you ever had
at any time, not counting babies who were dead at birth?

ENTER # OF CHILDREN |__|__|

B. When was your (first/second/ETC.) child born?

	MONTH	DAY	YEAR
FIRST CHILD	|__|__|	|__|__|	19|__|__|
SECOND	|__|__|	|__|__|	|__|__|
THIRD	|__|__|	|__|__|	|__|__|
FOURTH	|__|__|	|__|__|	|__|__|
FIFTH	|__|__|	|__|__|	|__|__|
SIXTH	|__|__|	|__|__|	|__|__|

3) Altogether, how many (more) children do you expect to have?

ENTER # |__|__|

OR

NONE . . (SKIP TO SECTION 4) . . . 00

4) When do you expect to have your (first/next) child-- in how many months or years?

ENTER MONTHS |__|__| ____________
OR

YEARS |__|__|

?

SECTION 4 ON REGULAR SCHOOLING

1. Now I would like to ask you some questions about school.

A. First, I would like to ask you about regular school, such as high school or college. Later in the interview I'll be asking about other types of schools and training programs.

Are you currently attending or enrolled in regular school, that is, in an elementary school, a middle school, a high school, a college, or a graduate school?

YES..................1
NO...(SKIP TO Q.4). 2

B. CODE Q. 1 ON CALENDAR.

2. A. What grade or year of school is that?
CIRCLE ONE CODE BELOW.

1ST GRADE.....01
2ND GRADE.....02
3RD GRADE.....03
4TH GRADE.....04
5TH GRADE.....05
6TH GRADE.....06
7TH GRADE.....07
8TH GRADE.....08
9TH GRADE.....09
10TH GRADE....10
11TH GRADE....11
12TH GRADE....12

1ST YEAR OF COLLEGE...13
2ND YEAR OF COLLEGE...14
3RD YEAR OF COLLEGE...15
4TH YEAR OF COLLEGE...16
5TH YEAR OF COLLEGE...17
6TH YEAR OF COLLEGE...18
7TH YEAR OF COLLEGE...19
8TH YEAR OF COLLEGE...20

B. ALSO SPECIFY GRADE AT Q. 1 ON CALENDAR

3. INTERVIEWER: IS RESPONDENT IN GRADES 1-12 (Q.2 CODED 1-12)?

Yes...(ASK A & B) 1
No...(SKIP TO Q.6) ... 2

IF CURRENTLY ENROLLED IN GRADES 1-12, ASK A & B:

A. There are many things that people might say to describe their schools. I am going to read some statements that other people have made about their schools, and I would like to know how well you think these statements describe your school.

HAND CARD E. As I read each statement, tell me whether you think the statement is very true, somewhat true, not too true, or not at all true for your school.

STATEMENT	Very True	Somewhat True	Not Too True	Not at All True
1. It's easy to make friends at this school.	1	2	3	4
2. Most of the teachers are willing to help with personal problems.	1	2	3	4
3. Most of my classes are boring.	1	2	3	4
4. I don't feel safe at this school.	1	2	3	4
5. Most of my teachers really know their subjects well.	1	2	3	4
6. You can get away with almost anything at this school.	1	2	3	4
7. My schoolwork requires me to think to the best of my ability.	1	2	3	4
8. At this school, a person has the freedom to learn what interests him or her.	1	2	3	4
9. This school offers good job counseling.	1	2	3	4

B. How satisfied are you with your school -- very satisfied somewhat satisfied, somewhat dissatisfied, or very dissatisfied?

Very satisfied	4
Somewhat satisfied	3
Somewhat dissatisfied	2
Very dissatisified	1

NOW SKIP TO Q.6

IF RESPONDENT NOT CURRENTLY ENROLLED (Q.1 CODED 2), ASK QS. 4 & 5.

4. A. When were you last enrolled in regular school--what was the month and year?

MONTH |__|__|
AND
YEAR 19|__|__|

IF VOLUNTEERED: Never enrolled..(SKIP TO Q.30)...0000

B. ENTER DATE AT Q. 2 ON CALENDAR.

5. What is the main reason you left at that time? RECORD VERBATIM AND CODE ONE ONLY. IF MORE THAN ONE REASON GIVEN, PROBE: What is the one main reason?

____

____

RECEIVED DEGREE, COMPLETED COURSE-WORK	01
EXPELLED OR SUSPENDED	10
GETTING MARRIED	02
PREGNANCY	03
SCHOOL TOO DANGEROUS	11
LACK OF ABILITY. POOR GRADES	05
OTHER REASONS DIDN'T LIKE SCHOOL	04
HOME RESPONSIBILITIES	06
OFFERED GOOD JOB, CHOSE TO WORK	07
FINANCIAL DIFFICULTIES, COULDN'T AFFORD TO ATTEND..	08
ENTERED MILITARY	09
MOVED AWAY FROM SCHOOL	12
OTHER (SPECIFY) ______________________________	13

IF R IS CURRENTLY ENROLLED (SEE Q. 2), CODE IN Q. 6 BELOW YEAR ENROLLED WITHOUT ASKING AND GO TO Q. 7.

6. What is the highest grade of regular school you have ever attended? CIRCLE ONE CODE BELOW.

NONE.(SKIP TO Q.30).	00		
1ST GRADE...........	01	1ST YEAR OF COLLEGE...	13
2ND GRADE...........	02	2ND YEAR OF COLLEGE...	14
3RD GRADE...........	03	3RD YEAR OF COLLEGE...	15
4TH GRADE...........	04	4TH YEAR OF COLLEGE...	16
5TH GRADE...........	05	5TH YEAR OF COLLEGE...	17
6TH GRADE...........	06	6TH YEAR OF COLLEGE...	18
7TH GRADE...........	07	7TH YEAR OF COLLEGE...	19
8TH GRADE...........	08	8TH YEAR OF COLLEGE...	20
9TH GRADE...........	09		
10TH GRADE..........	10		
11TH GRADE..........	11		
12TH GRADE..........	12		

7. What is the highest grade or year of regular school that you have completed and got credit for? CIRCLE ONE CODE BELOW.

NONE..........00
1ST GRADE.....01
2ND GRADE.....02
3RD GRADE.....03
4TH GRADE.....04
5TH GRADE.....05
6TH GRADE.....06
7TH GRADE.....07
8TH GRADE.....08
9TH GRADE.....09
10TH GRADE....10
11TH GRADE....11
12TH GRADE....12

1ST YEAR OF COLLEGE...13
2ND YEAR OF COLLEGE...14
3RD YEAR OF COLLEGE...15
4TH YEAR OF COLLEGE...16
5TH YEAR OF COLLEGE...17
6TH YEAR OF COLLEGE...18
7TH YEAR OF COLLEGE...19
8TH YEAR OF COLLEGE...20

ASK Q. 8 FOR THE SCHOOL R (ATTENDS/LAST ATTENDED) FOR GRADES 1-12:

8. What is the name of the (regular/high) school you (currently attend/last attended)?

____

9. Where is that school located--what is the town or city and state?

IF IN THE UNITED STATES, PROBE FOR AND RECORD INFORMATION IN A:

A. ______________________________
TOWN OR CITY

____
STATE

IF NO TOWN OR CITY IN A, ASK B:
B. And in what county is that?

____
COUNTY

IF OUTSIDE THE UNITED STATES, RECORD NAME OF COUNTRY IN C.

C. COUNTRY: ____________________

D. INTERVIEWER: IF SCHOOL IS IN YOUR AREA, LOOK UP AND ENTER STREET ADDRESS AND ZIP CODE DURING YOUR EDIT. OTHERWISE, ASK R FOR THIS INFORMATION.

____
STREET ADDRESS

|--|--|--|--|--|
|__|__|__|__|__|
ZIP CODE

10. Is that a public school, or is it a private or parochial school? CODE ONE ONLY.

Public 1
Private or parochial 2

11. When did you start going to school there--in what month and year? ENTER HERE.

```
                |--|--|
      MONTH     |__|__|
                |--|--|
    AND YEAR  19|__|__|
```

12. INTERVIEWER SEE Q.2: IS RESPONDENT CURRENTLY ENROLLED IN GRADES 1-12 (Q. 2 CODED 1-12)?

YES ..(SKIP TO Q.15)...1
NO......................2

13. INTERVIEWER: IS THE HIGHEST GRADE R ATTENDED GRADES 1-12? (SEE Q. 6)

YES ...(COPY DATE FROM Q. 4
INTO "A" BELOW WITHOUT
ASKING AND GO TO Q. 14).... 1

NO ....(ASK A)............ 2

A. When did you stop going to school there or graduate? ENTER HERE.

```
                |--|--|
      MONTH     |__|__|
                |--|--|
    AND YEAR  19|__|__|
```

14. Do you have a high school diploma or have you ever passed a high school equivalency or GED test?

Yes ......(ASK A & B)................. 1
No ....(GO TO Q.15)................ 2

IF YES, ASK A & B:
A. Which do you have, a high school diploma or a GED?

High school diploma 1
GED 2
IF VOL.: Both.....(ASK B REGARDING
HIGH SCHOOL DIPLOMA)............ 3

B. When did you receive your (high school diploma/G.E.D.)?

```
                |--|--|
      MONTH     |__|__|
                |--|--|
    AND YEAR  19|__|__|
```

15. INTERVIEWER: IS RESPONDENT CURRENTLY ENROLLED IN GRADES 9-12?

YES ......(READ Q.16A).......1
NO ....(ASK A)............2

A. IF NO: HAS RESPONDENT ATTENDED 9th GRADE OR HIGHER?

YES .....(READ Q. 16B).....1
NO .....(SKIP TO Q.30).....2

16. A. IF CURRENTLY ENROLLED IN GRADES 9-12 READ: What courses are you taking this year? Please include all the courses you have taken since the beginning of the school year.

B. IF NOT CURRENTLY ENROLLED IN 9-12: What courses did you take in your last year at (SCHOOL IN Q. 8)? Please include all of the courses you took during that year.

17. Do you feel that your program (is/was) largely vocational, commercial, college preparatory, or (is/was) it a general program?

Vocational............................1
Commercial............................2
College preparatory..(SKIP TO Q.21)..3
General program......(SKIP TO Q.21)..4
DON'T KNOW...........(SKIP TO Q.21)..8

18. A. HAND CARD F. Please take a look at this card. Which of the categories listed here best describes the kind of (vocational/commercial) program that (is/was)? CODE ONE ONLY.

Agricultural 1
Business or office 2
Distributive education 3
Health 4
Home economics 5
Trade or industrial 6
Other (SPECIFY)______________________ 7

B. What job (are/were) you training for? RECORD VERBATIM.

19. INTERVIEWER: IS RESPONDENT CURRENTLY ENROLLED IN GRADES 9-12 (Q.2 CODED 9-12)?

YES..(SKIP TO Q.30)...1
NO....................2

20. Did you get a job as a (JOB IN Q. 18B) within 6 months after you (left/completed) high school?

Yes...(ASK A)........ 1
No....(ASK B)........ 2

A. IF YES: Did you have any problems getting that kind of job?

Yes ......(ASK [1]).................. 1
No ....(GO TO Q.21)............... 2

(1) IF ANY PROBLEMS: What kinds of problems did you have? PROBE ONCE: What other kinds of problems did you have? RECORD VERBATIM AND CODE ALL THAT APPLY.

____

____

JOBS SCARCE IN THIS FIELD 1
INSUFFICIENT TRAINING OR EXPERIENCE 2
DIDN'T KNOW WHERE TO LOOK 3
OTHER (SPECIFY)
_______________________________ 4

GO TO Q. 21

B. IF NO: Why didn't you get that kind of job? PROBE ONCE: What other reasons were there? RECORD VERBATIM AND CODE ALL THAT APPLY.

____

____

COULDN'T FIND A JOB IN THIS FIELD 01

DIDN'T LOOK FOR A JOB IN THIS FIELD ... 02

PREFERRED A JOB IN A DIFFERENT FIELD .. 03

WENT ON FOR ADDITIONAL SCHOOLING 04

DIDN'T FINISH THE PROGRAM 05

INSUFFICIENT TRAINING OR EXPERIENCE ... 06

DIDN'T KNOW WHERE TO LOOK 07

HEALTH PROBLEMS 08

OTHER (SPECIFY) ____________________ 09

21. INTERVIEWER: SEE Q.6. WHAT IS THE HIGHEST GRADE RESPONDENT HAS ATTENDED?

1 to 12TH GRADE ....(SKIP TO Q.30) 1

1st YEAR OF COLLEGE OR HIGHER ..(CHECK BOX AT Q. 3 ON CALENDAR AND GO ON TO Q. 22)........... 2

22. After you completed high school, when did you first attend college--in what month and year?

MONTH |__|__|

AND YEAR 19|__|__|

23. Now I would like to ask you about the degree-granting college or university you (are attending/last attended).

A. What is the name of the college or university you (are presently attending/last attended)?

____

B. Where is that school located--what is the town or city and state?

____
TOWN OR CITY

____
STATE

IF NO TOWN OR CITY, ASK:
And in what county is that?

____
COUNTY

IF OUTSIDE THE UNITED STATES, RECORD COUNTRY:

____

C. (Is/Was) that a 2 year or a 4 year school?

2 year 1

4 year 2

D. What (is/was) your field of study? RECORD VERBATIM. PROBE IF NECESSARY: What (are/were) you majoring in?

____

____

24. INTERVIEWER: IS R CURRENTLY ENROLLED IN COLLEGE? (SEE Q. 1)

YES ..(GO TO Q. 25)... 1

NO ......(ASK A)...... 2

A. IF NO, INTERVIEWER: SEE Q. 4. WAS THE DATE R WAS LAST ENROLLED IN REGULAR SCHOOL AFTER SEPT. 1, 1978?

YES 1

NO ..(SKIP TO Q. 29).. 2

25. (Does/Did) the school you attend(ed) consider you a full or a part-time student? IF DON'T KNOW, PROBE: What (do/did) you consider yourself?.

Full time student......1
Part time student......2
DON'T KNOW.............8

26. What (are/were) the full time tuition and fees for this academic year at the school where you (are currently/were) enrolled? Please include the full amount even though you (may obtain/may have obtained) some of the money from scholarships or other sources. Do not include charges for room and board.

IF R ENROLLED PART-TIME, PROBE: Even though you (are/were) not enrolled full-time, please tell me what the tuition and fees (would be/would have been) if you were going full-time.

TUITION AND FEES $|--|--| |--|--|--|
|__|__| ,|__|__|__|.00

27. Did you receive a loan to cover any of the costs for this year's college expenses?

Yes.......................1
No........................2

28. (Are/Were) you receiving any (other) form of financial aid for the academic year, such as a scholarship, a grant, a fellowship, an assistantship, a tuition waiver, or veteran's educational benefits under the G.I. Bill or V.E.A.P.?

Yes...(ASK A)........1
No...(GO TO Q. 29)...2

A. IF YES: We would like to know which kinds of financial aid you (have/had). [First, (do/did) you have/Next, (do/did) you (also) have] (READ EACH CATEGORY). CODE YES OR NO FOR EACH.

	Yes	No
1) a scholarship?	1	2
2) a grant?..............................	1	2
3) a fellowship?.........................	1	2
4) an assistantship?.....................	1	2
5) a tuition waiver?.....................	1	2
6) Any veteran's educational benefits or V.E.A.P.?...........................	1	2
7) Any aid from the military educational assistance program?..................	1	2
8) Any other form of financial aid?......	1	2

IF YES TO 8, SPECIFY BELOW.

---

29. (During this school year/In the last year you attended college), (do/did) any relatives or friends [(other than your (husband/wife)] help pay for your schooling or your living expenses?

Yes ...(ASK.A).....1
No ..(GO TO Q.30)..2

A. IF YES: How much of your schooling and living expenses (do/did) they pay? Would you say that they (pay/paid) all of your expenses, half or more of your expenses, or less than half of your expenses?

All 1
Half or more ...2
Less than half .3

ASK EVERYONE:

30. What is the highest grade or year of regular school, that is, elementary school, high school, college, or graduate school that you would like to complete? CIRCLE ONE CODE BELOW.

1ST GRADE	01	1ST YEAR OF COLLEGE	13
2ND GRADE	02	2ND YEAR OF COLLEGE (ASSOCIATE'S DEGREE)	14
3RD GRADE	03	3RD YEAR OF COLLEGE	15
4TH GRADE	04	4TH YEAR OF COLLEGE (BACHELOR'S DEGREE)	16
5TH GRADE	05	5TH YEAR OF COLLEGE (MASTER'S DEGREE)	17
6TH GRADE	06	MORE THAN 5 YEARS OF COLLEGE ..(LAW DEGREE, Ph.D., M.D., LLD, DDS, JD)	18
7TH GRADE	07		
8TH GRADE	08		
9TH GRADE	09		
10TH GRADE	10		
11TH GRADE	11		
12TH GRADE	12		

31. As things now stand, what is the highest grade or year you think you will actually complete? CIRCLE ONE CODE BELOW.

1ST GRADE	01	1ST YEAR OF COLLEGE	13
2ND GRADE	02	2ND YEAR OF COLLEGE (ASSOCIATE'S DEGREE)	14
3RD GRADE	03	3RD YEAR OF COLLEGE	15
4TH GRADE	04	4TH YEAR OF COLLEGE (BACHELOR'S DEGREE)	16
5TH GRADE	05	5TH YEAR OF COLLEGE (MASTER'S DEGREE)	17
6TH GRADE	06	MORE THAN 5 YEARS OF COLLEGE ..(LAW DEGREE, Ph.D., M.D., LLD, DDS, JD)	18
7TH GRADE	07		
8TH GRADE	08		
9TH GRADE	09		
10TH GRADE	10		
11TH GRADE	11		
12TH GRADE	12		

32. Now think about your best or closest friend. What is the highest grade or year of regular school that this friend wants to complete? CIRCLE ONE CODE BELOW.

1ST GRADE	01	1ST YEAR OF COLLEGE	13
2ND GRADE	02	2ND YEAR OF COLLEGE (ASSOCIATE'S DEGREE)	14
3RD GRADE	03	3RD YEAR OF COLLEGE	15
4TH GRADE	04	4TH YEAR OF COLLEGE (BACHELOR'S DEGREE)	16
5TH GRADE	05	5TH YEAR OF COLLEGE (MASTER'S DEGREE)	17
6TH GRADE	06	MORE THAN 5 YEARS OF COLLEGE ..(LAW DEGREE, Ph.D., M.D., LLD, DDS, JD)	18
7TH GRADE	07		
8TH GRADE	08		
9TH GRADE	09		
10TH GRADE	10		
11TH GRADE	11		
12TH GRADE	12		

2. INTERVIEWER: SEE Q.1, SECTION 4. IS RESPONDENT CURRENTLY ENROLLED IN REGULAR SCHOOL (Q.1 CODED 1)?

YES...(READ A)...........1
NO....(READ B)...........2

A. IF CURRENTLY ENROLLED: If next summer you were offered a full-time job at (READ AMOUNT), do you think you would accept it ...READ CATEGORIES a-g.

B. IF NOT CURRENTLY ENROLLED: If right now you were offered a full-time job at (READ AMOUNT), do you think you would accept it ...READ CATEGORIES a-g.

READ a-g FOR COLUMN 1 BEFORE GOING TO COLUMN 2	COLUMN 1 $2.50/Hr Yes	No	COLUMN 2 $3.50/Hr Yes	No	COLUMN 3 $5.00/Hr Yes	No
a. if it were washing dishes?	1	2	1	2	1	2
b. if it were working in a factory?	1	2	1	2	1	2
c. if it were working as a cleaning person?	1	2	1	2	1	2
d. if it were working at a check-out counter in a supermarket?	1	2	1	2	1	2
e. if it were working cleaning up neighborhoods?	1	2	1	2	1	2
f. if it were working at a hamburger place?	1	2	1	2	1	2
g. if it were working away from home in a national forest or a park?	1	2	1	2	1	2

h. INTERVIEWER: FOR EVERY "YES" IN COLUMN 1, DRAW A LINE ACROSS ROW. IF COLUMN 1 IS CODED "YES" FOR ALL ITEMS a-g, GO TO SECTION 6. OTHERS, GO TO COLUMN 2 FOR REMAINING ITEMS. DRAW A LINE ACROSS ROW FOR EVERY "YES" IN COLUMN 2. IF ALL ITEMS a-g ARE NOW LINED OUT, GO TO SECTION 6. OTHERS GO TO COLUMN 3 FOR REMAINING ITEMS.

SECTION 6 ON KNOWLEDGE OF AND EXPERIENCES WITH THE WORLD OF WORK

1. Next I'd like your opinion about the kind of work that people in certain jobs usually do. For each occupation on this card (HAND CARD BOOKLET 1 TO RESPONDENT) there are three descriptions of job duties. Will you please tell me which description you think best fits each job? Be sure to read all of the possible answers before you decide.

a. Hospital orderly ...

helps to take care of hospital patients.....1

orders food and other supplies for hospital kitchens........................2

works at hospital desk where patients check in...........................3

DON'T KNOW....................................8

b. Department store buyer ...

selects the items to be sold in a section of a department store...............1

checks on the courtesy of sales people by shopping at the store 2

buys department stores that are about to go out of business.................3

DON'T KNOW....................................8

c. Key punch operator ...

operates a machine which sends telegrams.............................1

operates a machine which punches holes in cards used in computers............2

operates a cordless telephone switchboard and pushes switch keys to make telephone connections.......................3

DON'T KNOW....................................8

d. Fork lift operator...

operates a machine that makes a certain kind of agricultural tool...........1

operates a freight elevator in a warehouse or factory.......................2

drives an electrical or gas powered machine to move material in a warehouse or factory.......................3

DON'T KNOW.................................8

e. Medical illustrator...

hands tools and equipment to a surgeon during an operation...............1

demonstrates the use of various types of medicines..........................2

draws pictures that are used to teach anatomy and surgical operating procedures.......................3

DON'T KNOW.................................8

f. Machinist...

makes adjustments on automobile, airplane, and tractor engines...............1

repairs electrical equipment................2

sets up and operates metal lathes, shapers, grinders, buffers, etc.............3

DON'T KNOW.................................8

g. Dietician...

waits on tables in a restaurant.............1

suggests exercises for persons who are overweight or sick..................2

plans menus for hospitals and schools.......3

DON'T KNOW.................................8

h. Economist...

prepares menus in a hospital, hotel or other such establishment.................1

does research on such matters as general business conditions, unemployment, etc......2

assists a chemist in developing chemical formulas...........................3

DON'T KNOW..................................8

i. Assembler...

puts together and fixes machines used on an assembly line............1

takes broken parts off an assembly line and sends them to scrap area...........2

works on a production line putting parts together. 3

DON'T KNOW..................................8

2. INTERVIEWER: SEE Q.1B, SECTION 1. IS R

14 OR 15 YEARS OLD (SKIP TO SECTION 7)......1

16 TO 22 YEARS OLD 2

We're trying to find out the main reasons why many young people your age have trouble getting a good job. Have any of the following things ever caused you any problems in getting a good job--(First/Next) READ CATEGORIES A-F AND CODE "YES" OR "NO" FOR EACH.

	YES	NO
a. Lack of transportation? (PROBE IF NECESSARY: Has it caused you any problems in getting a good job?)	1	2
b. Discrimination on the basis of race?	1	2
c. Discrimination on the basis of nationality?	1	2
d. Discrimination on the basis of sex?	1	2
e. Discrimination on the basis of age?	1	2
f. A problem with English?	1	2

3. Have any other things ever caused you problems in getting a good job?

Yes ....(ASK A)............. 1

No ...(GO TO Q. 4).......... 2

A. IF YES: What other things have ever caused you problems in getting a good job? RECORD VERBATIM AND CODE ALL THAT APPLY.

LACK OF EXPERIENCE	01
LACK OF EDUCATION	02
LACK OF TRAINING	03
LACK OF ABILITY	04
CAN'T READ OR WRITE	05
PROBLEMS WITH HEALTH	06
EMPLOYERS DON'T LIKE MY APPEARANCE	07
LACK OF CHILD CARE	08
OTHER FAMILY RESPONSIBILITIES	09
DON'T KNOW WHERE TO LOOK	10
LACK OF AVAILABLE JOBS	11
OTHER (SPECIFY) ______________	12

4. Not counting regular schooling like high school or college, would you like to get any other occupational or job training?

Yes ....(ASK A)................ 1

No ....(GO TO SECTION 7)........... 2

A. IF YES: What kind of job would you most like to be trained for? RECORD VERBATIM.

SECTION 7 MILITARY

The next few questions are about the military.

1. INTERVIEWER: IS R

14-16 YEARS OLD..(SKIP TO Q. 72).1
17-22 YEARS OLD.................. 2

2. INTERVIEWER: SEE Q. 3 ON CALENDAR AND CODE ONE

R HAS ATTENDED/IS NOW ATTENDING COLLEGE........................ 1
R HAS NEVER ATTENDED COLLEGE (SKIP TO Q. 6)................ 2

3. Are you currently participating in a officer training program, for example, ROTC, in a college or university?

Yes...(GO TO Q. 4).............. 1
No....(ASK A).................... 2

A. IF NO: Have you ever participated in an officer training program in a college or university?

Yes.............................. 1
No.....(SKIP TO Q. 6)........... 2

4. How long (have you been/were you) in such a program?

MONTHS |__|__|

YEARS |__|__|

5. During your participation (did the program pay/is the program paying) for your tuition or fees?

Yes.............................. 1
No............................... 2

6. Have you ever enlisted or been sworn into any branch of the Armed Forces, including the National Guard or the Reserves?

Yes.............................. 1
No...........(SKIP TO Q. 65).... 2

7. Which branch or branches have you been sworn into? CIRCLE ALL THAT APPLY.

	BRANCHES	
ACTIVE FORCES	ARMY......(ASK A)...	01
	NAVY......(ASK A)...	02
	AIR FORCE.(ASK A)...	03
	MARINES...(ASK A)...	04
RESERVES	Army Reserves.......	05
	Navy Reserves.......	06
	Air Force Reserves..	07
	Marine Reserves.....	08
GUARD	Air National Guard..	09
	Army National Guard.	10
	Coast Guard..(IF ONLY BRANCH CITED, SKIP TO SECTION 8).....	11
	OTHER (SPECIFY AND SKIP TO SECTION 8) ______________________	12

IF CODES 01-04, ASK A:

A. Was that in the regular (BRANCH OF SERVICE), (BRANCH OF SERVICE) reserves, Guard, or both?

Regular	1
Reserves or Guard ...	2
Both	3

INTERVIEWER: IF RESERVES OR BOTH, CHECK Q.7. BE SURE THAT ALL CODES THAT APPLY ARE CIRCLED ABOVE.

8. INTERVIEWER: CODE ONE

R HAS SERVED IN ONLY ONE BRANCH (READ A)	1
R HAS SERVED IN AN ACTIVE FORCE AND RESERVES OR GUARD...(GO TO Q. 9)	2

A. IF CODE 1: We would like to ask you about your service in the (BRANCH).

|-----------------|
SKIP TO Q. 11

9. In which branch did you last serve?

ARMY	01
NAVY	02
AIR FORCE	03
MARINES	04
Army Reserves	05
Navy Reserves	06
Air Force Reserves	07
Marine Reserves	08
Air National Guard	09
Army National Guard	10
Coast Guard	11
OTHER	12

10. We would like to ask you about both your active duty enlistment and your service in the (Reserves/National Guard).. Let's begin with your service in the (BRANCH OF MOST RECENT ENLISTMENT).

SEC 07

	MOST RECENT/CURRENT ENLISTMENT	PREVIOUS ENLISTMENT
11. In what month and year did you first enter (active duty in) the (BRANCH)?	MONTH ☐☐ YEAR ☐☐	MONTH ☐☐ YEAR ☐☐
A. INTERVIEWER: WAS R IN ACTIVE FORCE DURING THIS PERIOD OF SERVICE?	Yes............... 1 No.(GO TO Q. 12). 2	Yes............... 1 No.(GO TO Q. 12). 2
B. INTERVIEWER: IF DATE IS IN 1978 OR 1979, ASK: On what day was that? ENTER DAY HERE AND RECORD ENTRY DATE ON CALENDAR.	DAY ☐☐	DAY ☐☐
12. When you first enlisted in the (BRANCH), how many years (of active duty) did you sign up for?	YEARS ☐☐	YEARS ☐☐ SKIP TO Q. 15
13. Are you currently (on active duty/serving in) the (Branch)?	Yes...(ANSWER A)..... 1 No..(SKIP TO Q. 15).. 2	////////////////////////
A. INTERVIEWER: WAS R IN ACTIVE FORCE DURING THIS PERIOD OF SERVICE?	YES .... 1 NO .(GO TO Q.14). 2	
B. IF YES, INTERVIEWER, ENTER INTERVIEW DATE ON CALENDAR. DRAW A LINE FROM (ENTRY DATE /JAN. 1, 1978) TO NOW.		////////////////////////
14. In what month and year will your current enlistment end?	MONTH ☐☐ YEAR 19☐☐ SKIP TO Q. 17	////////////////////////

15. In what month and year did you separate from (BRANCH)?	MONTH |__|__| YEAR |__|__| DAY |__|__|	MONTH |__|__| YEAR |__|__| DAY |__|__|
A. INTERVIEWER: WAS R IN ACTIVE FORCES DURING THIS PERIOD OF SERVICE?	YES.............. 1 NO.(GO TO Q.16).. 2	YES.............. 1 NO.(GO TO Q.16) ..2
B. INTERVIEWER: IF DATE IS IN 1978 OR 1979, ASK: On what day was that? ENTER DAY HERE AND RECORD EXIT DATE ON CALENDAR, DRAW A LINE FROM (ENTRY DATE/ JAN. 1, 1978) TO DATE SEPARATED.	DAY |__|__|	DAY |__|__|
16. When you went into the (BRANCH) did you receive any enlistment bonuses?	Yes...(SKIP TO Q. 20)..1 No...(SKIP TO Q. 21).. 2	Yes...(SKIP TO Q. 20)..1 No...(SKIP TO Q.21)... 2
17. Is this enlistment period in the (BRANCH) your 1st, 2nd, or what? If you received an extension to your current enlistment, do not count this as a new enlistment period.	1st Enlistment....... 1 2nd.(SKIP TO Q. 19).. 2 3rd.(SKIP TO Q. 19).. 3	//////////////////////// //////////////////////// //////////////////////// //////////////////////// ////////////////////////
18. Certain military jobs carry a cash enlistment bonus. When you enlisted in (BRANCH), did you sign up for a job which paid such a bonus?	Yes..(SKIP TO Q.20).. 1 No..(SKIP TO Q. 21).. 2 Don't know.. (SKIP TO Q. 21)........... 8	//////////////////////// //////////////////////// //////////////////////// ////////////////////////
19. At your last re-enlistment, did you receive a re-enlistment bonus?	Yes....................1 No..(SKIP TO Q. 21).. 2 Don't Know..(SKIP TO Q. 21)............ 8	//////////////////////// //////////////////////// //////////////////////// ////////////////////////
20. What (is/was) the total amount before taxes and deductions of the bonus you received (or will receive)?	$ |___|___| , |___|___|___|	$ |___|___| , |___|___|___|

21. What (is/was) your pay grade [when you left the (BRANCH)]?	E ☐☐ O ☐☐ W ☐☐ DON'T KNOW ...... 998 Other (SPECIFY) ____________ .004	E ☐☐ O ☐☐ W ☐☐ DON'T KNOW ...... 998 Other (SPECIFY) ____________ .004
22. INTERVIEWER: (IS/WAS) THIS ENLISTMENT IN THE RESERVES OR NATIONAL GUARD?	Yes..(SKIP TO Q. 24)..1 NO.................... 2	YES..(SKIP TO Q. 24).. 1 No.................... 2
23. [When you left the (BRANCH),] What (is/was) your total monthly pay before taxes and other deductions. Please include basic pay and allowances for housing or food and any special pays.	$ ☐☐ , ☐☐☐ SKIP TO Q. 27	$ ☐☐ , ☐☐☐ SKIP TO Q. 29
24. INTERVIEWER: WAS R IN RESERVES OR GUARD ANY TIME DURING 1978? ('YES' TO Q. 13 OR DATE IN Q. 15 SINCE JAN. 1, 1978.)	Yes..................1 No.(SKIP TO Q. 27)...2	Yes.................. 1 No.(SKIP TO Q. 29)... 2
25. During 1978, how many drills were you paid for? By drill we mean a 4 hour period of training.	# OF DRILLS ☐☐	# OF DRILLS ☐☐
26. How many weeks of active of duty did you serve in 1978, including initial training, summer camp and any mobilization or call ups?	WEEKS ☐☐	WEEKS ☐☐ SKIP TO Q. 29

SEC 07

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//////////////////////////
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27. <u>INTERVIEWER: IS R CURRENTLY ON ACTIVE DUTY IN THE ARMY, NAVY, AIR FORCE, OR MARINES?</u> (IF YES TO BOTH QUESTIONS 11A AND 13)

YES.................... 1
NO..(SKIP TO Q. 29)... 2

28. During the last 7 days, how many hours did you work? Do not include any hours you were on call but not actually working.

```
       |--|--|
 HOURS |__|__|
```

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//////////////////////////
//////////////////////////
//////////////////////////
/////////////////////////
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29. Now I'd like to ask you about your military jobs and training. [at the time you left the (BRANCH)].

<u>FOR ARMY, MARINE CORPS, AND NATIONAL GUARD AND THE RESERVES OF THESE BRANCHES:</u>

What (is/was) your (current) Primary MOS?

```
|--|--|--|--|--|--|--|        |--|--|--|--|--|--|--|
|__|__|__|__|__|__|__|        |__|__|__|__|__|__|__|

  |----------------|            |----------------|
  | SKIP TO Q. 31  |            | SKIP TO Q. 31  |
  |----------------|            |----------------|
OR                            OR
DON'T KNOW (SKIP              DON'T KNOW (SKIP
  TO Q. 30) ...... 9998         TO Q. 30) ...... 9998
```

<u>FOR NAVY AND NAVY RESERVES:</u>

What (is/was) your (current) Primary RATING?

```
|--|--|--|--|--|--|--|        |--|--|--|--|--|--|--|
|__|__|__|__|__|__|__|        |__|__|__|__|__|__|__|

  |----------------|            |----------------|
  | SKIP TO Q. 31  |            | SKIP TO Q. 31  |
  |----------------|            |----------------|
OR                            OR
DON'T KNOW (SKIP              DON'T KNOW (SKIP
  TO Q. 30) ...... 9998         TO Q. 30) ...... 9998
```

<u>FOR AIR FORCE AND AIR FORCE RESERVES:</u>

What (is/was) your (current) Primary AFSC?

```
|--|--|--|--|--|--|--|        |--|--|--|--|--|--|--|
|__|__|__|__|__|__|__|        |__|__|__|__|__|__|__|

  |----------------|            |----------------|
  | SKIP TO Q. 31  |            | SKIP TO Q. 31  |
  |----------------|            |----------------|
OR                            OR
DON'T KNOW (SKIP              DON'T KNOW (SKIP
  TO Q. 30) ... 9999998         TO Q. 30) ... 9999998
```

30. INTERVIEWER: IF R SAYS "DON'T KNOW" IN Q. 29 ASK A AND B. OTHERWISE, GO TO Q. 31. A. What (is/was) the name of the job you were trained for? B. What (are/were) your main activities or duties?	____________________ ____________________ ____________________ ____________________	____________________ ____________________ ____________________ ____________________
31. Did you receive any formal school training for (this/that) (MOS/RATING/AFSC)?	Yes.................. 1 No..(SKIP TO Q. 33).. 2	Yes.................. 1 No..(SKIP TO Q.33)... 2
32. In all, how many weeks of formal school training did you complete?	WEEKS |__|__|	WEEKS |__|__|
33. Did you receive any on the job training for (this/that) (MOS/RATING/AFSC)?	Yes.................. 1 No..(SKIP TO Q. 35).. 2	Yes.................. 1 No...(SKIP TO Q. 35).. 2
34. In all, how many weeks of on the job training for (this/that) (MOS/RATING/AFSC) did you receive?	WEEKS |__|__|	WEEKS |__|__|
35. Excluding OJT and formal school, [(since/after) you completed training], how many months (have you/did you) actually work(ed) in (your current/that) (MOS/RATING/AFSC)?	MONTHS |__|__|	MONTHS |__|__| SKIP TO Q. 37
36. INTERVIEWER: CODE ONE: R IS CURRENTLY	SERVING IN ACTIVE FORCES (SKIP TO Q. 39)..... 1 SERVING IN RESERVE/GUARD (SKIP TO Q. 38).... 2 NOT SERVING AT ALL..... 3	///////////////////////// ///////////////////////// ///////////////////////// ///////////////////////// ///////////////////////// /////////////////////////
37. Since you left the (BRANCH), have you used any skills from that (MOS/RATING/AFSC) in a civilian job?	Yes...(GO TO Q. 38)... 1 No.................... 2 IF VOLUNTEERED: No civilian job........ 3 SKIP TO Q. 39	Yes...(GO TO Q. 38)... 1 No.................... 2 IF VOLUNTEERED: No civilian job........ 3 SKIP TO Q. 39

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38. Does your current civilian job use any skills from your (MOS/RATING/AFSC)?	Yes.................... 1 No..................... 2 No civilian job....... 3	Yes.................... 1 No..................... 2 No civilian job....... 3
39. In addition to (your current/the) Primary (MOS/RATING/AFSC) (have you/did you) receive(d) training in another (MOS/RATING/AFSC)?	Yes.....................1 No..(SKIP TO Q.53).... 2	Yes.................... 1 No..(SKIP TO Q.53).... 2
40. Now I'd like to ask you about your military jobs and training. for this other (MOS/RATING/AFSC).		
FOR ARMY, MARINE CORPS, AND NATIONAL GUARD: What (is/was) this other MOS?	|__|__|__|__|__|__|__| | SKIP TO Q. 43 | OR DON'T KNOW (GO TO Q. 42) 9998	|__|__|__|__|__|__|__| | SKIP TO Q. 43 | OR DON'T KNOW (GO TO Q. 42) 9998
FOR NAVY: What (is/was) this other Rating?	|__|__|__|__|__|__|__| | SKIP TO Q. 43 | OR DON'T KNOW (GO TO Q. 42) 9998	|__|__|__|__|__|__|__| | SKIP TO Q. 43 | OR DON'T KNOW (GO TO Q. 42) 9998
FOR AIR FORCE: What (is/was) this other AFSC?	|__|__|__|__|__|__|__| | SKIP TO Q. 43 | OR DON'T KNOW (GO TO Q. 42) ... 9999998	|__|__|__|__|__|__|__| | SKIP TO Q. 43 | OR DON'T KNOW (GO TO Q. 42) ... 9999998

Q. 41 OMITTED

42. INTERVIEWER: IF R SAYS "DON'T KNOW" IN Q. 40 ASK A AND B. OTHERWISE GO TO Q. 43.

A. What (is/was) the name of the job you were trained for? ____________________ ____________________

B. What (are/were) your main activities or duties? ____________________ ____________________

____________________ ____________________

____________________ ____________________

SEC 07

43. Did you receive any formal school training for (this/that) other (MOS/RATING/AFSC)?	Yes.................... 1 No..(SKIP TO Q. 45).. 2	Yes.................... 1 NO.. (SKIP TO Q.45)... 2
44. In all, how many weeks of formal school training did you complete?	|--|--| WEEKS |__|__|	|--|--| WEEKS |__|__|
45. Did you receive any on the job training for (this/that) other (MOS/RATING/AFSC)?	Yes.................... 1 No.. (SKIP TO Q.47)... 2	Yes.................... 1 No..(SKIP TO Q.47).... 2
46. In all, how many weeks of on the job training for (this/that) other (MOS/RATING/AFSC) did you receive?	|--|--| WEEKS |__|__|	|--|--| WEEKS |__|__|
47. (Since/After) you completed training, how many months (have you/did you) actually work(ed) in (this/that) other (MOS/RATING/AFSC)?	|--|--| MONTHS |__|__|	|--|--| MONTHS |__|__| SKIP TO Q. 50
48. INTERVIEWER: CODE ONE: R IS CURRENTLY	SERVING ON ACTIVE FORCES.(SKIP TO Q.52) 1 SERVING IN RESERVES (SKIP TO Q. 51).... 2 NOT SERVING AT ALL (SKIP TO Q. 50).... 3	///////////////////////// ///////////////////////// ///////////////////////// ///////////////////////// ///////////////////////// /////////////////////////
Q. 49 OMITTED		
50. Since you left the (BRANCH), have you used any skills from your other (MOS/RATING/AFSC) in a civilian job?	Yes...(GO TO Q. 51)... 1 No..................... 2 IF VOLUNTEERED: No civilian job........ 3 SKIP TO Q. 52	Yes....(GO TO Q. 51).. 1 No..................... 2 IF VOLUNTEERED: No civilian job........ 3 SKIP TO Q. 52
51. Does your current civilian job use any skills from this (MOS/RATING/AFSC)?	Yes.................... 1 No..................... 2 IF VOLUNTEERED: No civilian job........ 3	Yes.................... 1 No..................... 2 IF VOLUNTEERED: No civilian job........ 3
52. In addition to those 2 (MOS'S/RATING'S/AFSC'S), (have you completed/did you complete) training in another (MOS/RATING/AFSC)?	Yes.................... 1 No..................... 2	Yes.................... 1 No..................... 2

53. At the time you entered the (BRANCH) how many years of regular school had you completed and got credit for?	NONE .... 00 1st GRADE .... 01 2nd GRADE .... 02 3rd GRADE .... 03 4th GRADE .... 04 5th GRADE .... 05 6th GRADE .... 06 7th GRADE .... 07 8th GRADE .... 08 9th GRADE .... 09 10th GRADE .... 10 11th GRADE .... 11 12th GRADE .... 12 1st YEAR OF COLLEGE . 13 2nd YEAR OF COLLEGE . 14 3rd YEAR OF COLLEGE . 15 4th YEAR OF COLLEGE . 16 5th YEAR OF COLLEGE . 17 6th YEAR OF COLLEGE . 18 7th YEAR OF COLLEGE . 19 8th YEAR OF COLLEGE . 20	NONE .... 00 1st GRADE .... 01 2nd GRADE .... 02 3rd GRADE .... 03 4th GRADE .... 04 5th GRADE .... 05 6th GRADE .... 06 7th GRADE .... 07 8th GRADE .... 08 9th GRADE .... 09 10th GRADE .... 10 11th GRADE .... 11 12th GRADE .... 12 1st YEAR OF COLLEGE . 13 2nd YEAR OF COLLEGE . 14 3rd YEAR OF COLLEGE . 15 4th YEAR OF COLLEGE . 16 5th YEAR OF COLLEGE . 17 6th YEAR OF COLLEGE . 18 7th YEAR OF COLLEGE . 19 8th YEAR OF COLLEGE . 20
54. During your service in the (BRANCH), (did you/have you) take(n) any courses for which you received high school or college credit?	Yes.................... 1 No..(SKIP TO Q.58).... 2	Yes.................... 1 No..(SKIP TO Q. 58)... 2
55. During your service in the (BRANCH), how many years of regular school (did you complete/ have you completed) and (get/ gotten) credit for?	LESS THAN ONE .... 0 ONE YEAR .... 1 TWO YEARS .... 2 THREE OR MORE YEARS . 3	LESS THAN ONE .... 0 ONE YEAR .... 1 TWO YEARS .... 2 THREE OR MORE YEARS . 3
56. Did you receive a diploma or degree during this period of active duty?	Yes .... 1 No ..(SKIP TO Q.58).. 2	Yes .... 1 No ..(SKIP TO Q.58).. 2
57. What type of diploma or degree did you receive?	HIGH SCHOOL DIPLOMA (OR EQUIVALENT)..... 01 ASSOCIATE/JUNIOR COLLEGE (AA)........ 02 BACHELOR'S DEGREE.... 03 MASTER'S DEGREE...... 04 DOCTORAL DEGREE (PHD) 05 PROFESSIONAL DEGREE (MD, LLD, DDS)...... 06 OTHER (SPECIFY) ____________ 07	HIGH SCHOOL DIPLOMA (OR EQUIVALENT)..... 01 ASSOCIATE/JUNIOR COLLEGE (AA)........ 02 BACHELOR'S DEGREE.... 03 MASTER'S DEGREE...... 04 DOCTORAL DEGREE (PHD) 05 PROFESSIONAL DEGREE (MD, LLD, DDS)...... 06 OTHER (SPECIFY) ____________ 07

<table>
<tr><th></th><th></th><th></th></tr>
<tr><td>58. (Do/Did) you participate in the Veterans Education Assistance Program—V.E.A.P—during this period of enlistment?</td><td>Yes ....(ASK A)..... 1
No ....(GO TO Q. 59).. 2</td><td>Yes......(ASK A)..... 1
No ....(GO TO Q. 62). 2</td></tr>
<tr><td>A. IF YES: How much money (do/did) you contribute each month to this program?</td><td>$ |__|__|.00</td><td>$ |__|__|.00</td></tr>
<tr><td></td><td></td><td>| SKIP TO Q. 62 |</td></tr>
<tr><td>59. INTERVIEWER: IS R CURRENTLY SERVING IN ACTIVE FORCES, IN RESERVES OR GUARD?</td><td>YES................... 1
NO....(GO TO Q.62)... 2</td><td>/////////////////////////
/////////////////////////
/////////////////////////</td></tr>
<tr><td>60. At the end of your current term of service, do you think you will definitely re-enlist, probably re-enlist, probably not re-enlist, or definitely not re-enlist?</td><td>Definitely re-enlist.... 1
Probably re-enlist...... 2
Probably not re-enlist.. 3
Definitely not re-enlist 4</td><td>/////////////////////////
/////////////////////////
/////////////////////////
/////////////////////////
/////////////////////////
/////////////////////////</td></tr>
<tr><td>61. When you finally leave the (BRANCH), how many total years of service do you expect to have?</td><td>YEARS |__|__|</td><td>/////////////////////////
/////////////////////////
/////////////////////////
/////////////////////////
/////////////////////////</td></tr>
<tr><td>62. Now, taking all things together, how satisfied (are you/were you) with the (BRANCH)--very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?</td><td>Very satisfied........ 1
Somewhat satisfied.... 2
Somewhat dissatisfied. 3
Very dissatisfied..... 4</td><td>Very satisfied........ 1
Somewhat satisfied.... 2
Somewhat dissatisfied. 3
Very dissatisfied..... 4</td></tr>
<tr><td></td><td></td><td>| GO TO Q. 75 |</td></tr>
</table>

63. INTERVIEWER: HAS R SERVED IN ANOTHER BRANCH OF THE MILITARY? SEE QUESTION 7 OF THIS SECTION.

YES............................. 1
NO....(GO TO Q. 75)............. 2

64. Now, I'd like to ask you about your previous enlistment in the (BRANCH/Reserves/Guard). INTERVIEWER: ASK Q.'s 10-62 FOR PREVIOUS ENLISTMENT.

65. Have you ever taken the three-hour written test called the ASVAB that is required to enter the military?

Yes............................. 1
No.............................. 2

66. Have you ever talked to a military recruiter to get information about a branch of the military?

Yes............................. 1
No......(SKIP TO Q. 72)......... 2

67. What branches of the armed forces did you talk to? CODE ALL THAT APPLY

Army............................ 1
Navy............................ 1
Air Force....................... 1
Marines......................... 1
Reserves (any component)........ 1
National Guard (Army or Air).... 1

68. Have you ever taken the physical examination required to enter the military?

Yes............................. 1
No.........(SKIP TO Q. 71)...... 2

69. Which service were you trying to join when you took the physical exam? CODE ALL THAT APPLY

Army............................ 1
Navy............................ 1
Air Force....................... 1
Marines......................... 1
Reserves (any component)........ 1
National Guard (Army or Air).... 1

70. Did you meet the physical and mental requirements for enlisting in the (BRANCH FROM Q. 69/the service you were trying to join most recently)?

Yes............................. 1
No.....(SKIP TO SECTION 8)...... 2

71. What is the main reason you decided not to enlist in the (BRANCH from Q. 67 or Q. 69/the service you were trying to join most recently)? PROBE: What is the one main reason? RECORD VERBATIM AND CODE ONE ONLY.

JOB I WANTED WASN'T AVAILABLE WHEN I WANTED IT..............	1
DIDN'T QUALIFY FOR JOB I WANTED.	2
WASN'T ELIGIBLE FOR THE SERVICE I WANTED.....................	3
SPECIFIC BONUS PROGRAM FILLED...	4
DECIDED TO DO SOMETHING ELSE INSTEAD........................	5
DIDN'T THINK I'D LIKE MILITARY..	6
DECIDED TO GO TO SCHOOL.........	7
GOT A BETTER CIVILIAN JOB.......	8
OTHER (SPECIFY) ______________	9

72. Do you think for a young person to serve in the military is:

	Definitely a good thing,........	1
	Probably a good thing,..........	2
	Probably not a good thing,......	3
OR,	Definitely not a good thing?....	4
	Don't Know......................	8

73. Do you think, in the future, that you will:

	Definitely try to enlist,......	1
	Probably try to enlist,........	2
	Probably not try to enlist (SKIP TO SECTION 8)...........	3
OR	Definitely not try to enlist in the military? (SKIP TO SECT 8)	4

74. In which service do you think you will be most likely to enlist?

Army..........................	1
Navy..........................	2
Air Force.....................	3
Marines.......................	4
Reserves(any component).........	5
National Guard (Army or Air)....	6

|------------------|
SKIP TO SECTION 8

75. INTERVIEWER: IS R CURRENTLY SERVING IN THE ACTIVE FORCES OF THE MILITARY? (SEE ROW A OF CALENDAR)

YES.......(ASK A).............. 1
NO...(GO TO Q. 1, SECTION 8)... 2

A. Now we would like to ask you some more specific questions about your current military job.

```
|----------------------------|
|  SKIP TO Q. 19, SECTION 8  |
|----------------------------|
```

SECTION 8 ON
CURRENT LABOR FORCE STATUS (CPS QUESTIONS)

1. Now I'd like some information on what you were doing last week.
   What were you doing most of last week — working, going to school, or something else? RECORD VERBATIM AND CODE ONE ONLY.

   ____

   ____

CODE SMALLEST # MENTIONED

Working ......(SKIP TO Q.3).........	01
WITH A JOB BUT NOT AT WORK	02
LOOKING FOR WORK	03
KEEPING HOUSE	04
Going to school	05
UNABLE TO WORK ...(SKIP TO Q. 36)...	06
Other (SPECIFY)..__________________	07

2. Did you do any work at all last week, not counting work around the house? (INTERVIEWER NOTE: IF FARM OR BUSINESS OPERATOR IN HH, ASK R ABOUT UNPAID WORK.)

Yes	1
No ....(SKIP TO Q.8)...........	2

3. How many hours did you work last week at all jobs?

   ENTER # OF HOURS: |__|__|

4. INTERVIEWER, CODE. RESPONDENT WORKED:

1 - 34 HOURS ....(ASK Q.5)	1
35 - 48 HOURS ...(ASK Q.6)	2
49 OR MORE HOURS (SKIP TO Q.13)	3

ASK Q.5 ONLY IF CODE 1 IN Q.4.

5. Do you usually work 35 hours or more a week at this job?

Yes ....(ASK A)............	1
No...............(ASK B)............	2

A. IF YES: What is the reason you worked less than 35 hours last week? RECORD VERBATIM AND CODE ONE ONLY.

IF MORE THAN ONE REASON GIVEN, PROBE: What is the one main reason you worked less than 35 hours last week?

____

____

____

SLACK WORK	01
MATERIAL SHORTAGE	02
PLANT OR MACHINE REPAIR	03
NEW JOB STARTED DURING WEEK	04
JOB TERMINATED DURING WEEK	05
COULD FIND ONLY PART-TIME WORK	06
HOLIDAY - LEGAL OR RELIGIOUS	07
LABOR DISPUTE	08
BAD WEATHER	09
OWN ILLNESS	10
ILLNESS OF OTHER FAMILY MEMBER	11
ON VACATION	12
ATTENDS SCHOOL	13
TOO BUSY WITH HOUSEWORK, PERSONAL BUSINESS, ETC.	14
DID NOT WANT FULL-TIME WORK	15
FULL-TIME WORK WEEK UNDER 35 HOURS	16
OTHER REASON .(SPECIFY) ____________	19

NOW SKIP TO Q.13

B. IF NO: What is the reason you usually work less than 35 hours a week? RECORD VERBATIM AND CODE ONE ONLY.

IF MORE THAN ONE REASON GIVEN, PROBE: What is the one main reason you worked less than 35 hours last week?

____

____

____

SLACK WORK	01
MATERIAL SHORTAGE	02
PLANT OR MACHINE REPAIR	03
COULD FIND ONLY PART-TIME WORK	06
BAD WEATHER	09
OWN ILLNESS	10
ILLNESS OF OTHER FAMILY MEMBER	11
ATTENDS SCHOOL	13
TOO BUSY WITH HOUSEWORK, PERSONAL BUSINESS, ETC.	14
DID NOT WANT FULL-TIME WORK	15
FULL-TIME WORK WEEK UNDER 35 HOURS	16
OTHER REASON .(SPECIFY) ____________	17

NOW SKIP TO Q.13

ASK Q.6 ONLY IF "35-48" HOURS IN Q.4.

6. Did you lose any time or take any time off last week for any reason such as illness, holiday, or slack work?

Yes ....(ASK A & B)............ 1

No ....(GO TO Q.7)............. 2

IF YES, ASK A & B. OTHERWISE, GO TO Q.7.

A. How many hours did you take off?

ENTER # OF HOURS: |__|__|

B. You told me earlier that you worked (# OF HOURS IN Q.3) hours last week. In saying that you worked (# OF HOURS IN Q.3) hours, had you already subtracted the (# OF HOURS IN A) hours that you took off last week?

Yes.........(GO TO Q.13)............ 1

No..........(ASK C & D)............. 2

IF "NO" TO B, ASK C & D. OTHERWISE, GO TO Q.13.

C. Thinking of the (# OF HOURS IN A) hours that you took off last week, how many hours did you end up working last week, at all jobs?

ENTER # OF HOURS: |__|__|

D. INTERVIEWER CODE:
RESPONDENT WORKED:

1 - 34 HOURS .(ASK E) 1

35 OR MORE HOURS ..(SKIP TO Q.13)... 2

SEC 08

E. IF "1-34" HOURS IN D: What is the reason you worked less than 35 hours last week? RECORD VERBATIM AND CODE ONE ONLY.

IF MORE THAN ONE REASON GIVEN, PROBE: What is the one main reason you worked less than 35 hours last week?

____

____

____

SLACK WORK	01
MATERIAL SHORTAGE	02
PLANT OR MACHINE REPAIR	03
NEW JOB STARTED DURING WEEK	04
JOB TERMINATED DURING WEEK	05
COULD FIND ONLY PART-TIME WORK	06
HOLIDAY - LEGAL OR RELIGIOUS	07
LABOR DISPUTE	08
BAD WEATHER	09
OWN ILLNESS	10
ILLNESS OF OTHER FAMILY MEMBER	11
ON VACATION	12
ATTENDS SCHOOL	13
TOO BUSY WITH HOUSEWORK, PERSONAL BUSINESS, ETC.	14
DID NOT WANT FULL-TIME WORK	15
FULL-TIME WORK WEEK UNDER 35 HOURS	16
OTHER REASON .(SPECIFY) __________	19

NOW SKIP TO Q.13

7. Did you work any overtime or at more than one job last week?

Yes ....(ASK A)................ 1

No ....(SKIP TO Q.13)............ 2

IF "YES", ASK A. OTHERWISE, SKIP TO Q.13.

A. How many extra hours did you work?

ENTER # OF |--|--|
EXTRA HOURS: |__|__| ASK B

OR

NO EXTRA HOURS (SKIP TO Q.13)....... 00

B. You told me earlier that you worked (# OF HOURS IN Q.3) hours last week. In saying that you worked (# OF HOURS IN Q.3) hours, had you already included those extra hours you just told me about?

Yes ......(SKIP TO Q.13)............ 1

No ....(ASK C)................... 2

C. IF "NO" TO B: Think of the (# OF HOURS IN A) hours that you worked extra last week. How many hours altogether, did you end up working last week?

ENTER # OF |--|--|
HOURS: |__|__|
AND SKIP TO Q.13.

ASK Q.8 ONLY IF "NO" TO Q.2.

8. A. INTERVIEWER, LOOK AT Q.1. WAS CATEGORY 2 "WITH A JOB BUT NOT AT WORK" CODED?

YES ....(GO TO Q.9)............... 1

NO ....(ASK B)................... 2

B. IF NO: Did you have a job or business from which you were temporarily absent or on layoff last week?

Yes ....(ASK Q.9)................. 1

No ....(SKIP TO Q.29)............ 2

ASK Q.9 ONLY IF "YES" TO Q. 8A OR 8B.

9. Why were you absent from work last week? RECORD VERBATIM AND CODE ONE ONLY.

IF MORE THAN ONE REASON GIVEN, PROBE: What was the main reason why you were absent from work last week?

____

____

____

OWN ILLNESS.....(SKIP TO Q. 11)...... 01

ILLNESS OF OTHER FAMILY MEMBER...
...(SKIP TO Q. 11)................. 02

ON VACATION.....(SKIP TO Q. 11)...... 03

BAD WEATHER.....(SKIP TO Q. 11)...... 04

LABOR DISPUTE...(SKIP TO Q. 11)...... 05

NEW JOB TO BEGIN....(ASK A).......... 06

ON LAYOFF.........(GO TO Q. 10)...... 07

SCHOOL INTERFERED.(SKIP TO Q. 11).... 08

OTHER.....(SPECIFY BELOW AND
SKIP TO Q. 11)..................... 09

____

A. IF "NEW JOB IS TO BEGIN": Is your new job scheduled to begin within 30 days from today, or sometime after that?

Within 30 days 1

Some time after that 2

NOW SKIP TO Q.31

ASK Q.10 IF "ON LAYOFF" IN Q.9.

10. A. When you were laid off, were you given a definite date on which to report back to work, or were you not given such a date?

Was given a definite date to report back to work ....(ASK B)	1
Was not given such a date to report back to work ....(GO TO C)	2

B. IF "WAS GIVEN A DEFINITE DATE": Altogether, will your period of layoff last 30 days or less, or will it last more than 30 days?

30 days or less	1
More than 30 days	2

C. How many weeks ago were you laid off?

ENTER # OF WEEKS: |__|__|

D. Is the job from which you were laid off a full-time or a part-time job?

Full-time	1
Part-time	2

NOW SKIP TO Q.35

11. Are you getting wages or salary for any of the time off last week?

Yes	1
No	2
IF VOL: SELF-EMPLOYED	3

12. Do you usually work 35 hours or more a week at this job?

Yes	1
No	2

13. A. For whom did you work?

____

B. ALSO ENTER NAME OF EMPLOYER IN EMPLOYER FLAP, COLUMN 1.

C. In what town or city and state is this employer located?

____
TOWN OR CITY

(IF NO TOWN OR CITY,
RECORD COUNTY BELOW:

______________________________)

____
STATE

14. What kind of business or industry is this?

____

____

____

15. What kind of work were you doing for this job? RECORD VERBATIM. IF MORE THAN ONE KIND OF WORK: PROBE: What kind of work were you doing for the most hours last week?

____

____

____

____

16. What were your most important activities or duties? RECORD VERBATIM.

____

____

SEC 08

17) HAND CARD G. Were you... (READ CATEGORIES BELOW)

An employee of a private company, business, or individual for wages, salary, or commission, or (GO TO Q. 18)..................... 1

A government employee, or (ASK A)... 2

Self employed in own business, professional practice, or farm, or................(ASK B).... 3

Working without pay in family business or farm? .(SKIP TO Q. 27). 4

IF CODE 2 IN Q.17, ASK A

A. Were you an employee of the federal government, state government, or local government?

Federal government employee 1

State government employee 2

Local government employee 3

DON'T KNOW 8

SKIP TO Q. 19

IF CODE 3 IN Q.17, ASK B

B. Is your business incorporated or unincorporated?

Business incorporated 1

Business unincorporated 2

DON'T KNOW 8

SKIP TO Q. 19

18. Many companies or organizations have employees at more than one location. Besides the place where you work does (EMPLOYER) have any employees working at any other location, as far as you know?

Yes 1
No 2

A. At the place where you work, How many employees does (EMPLOYER) have?

ENTER # OF EMPLOYEES: |__|__|,|__|__|__|

IF YES TO Q. 18, ASK B. OTHERWISE, GO TO Q. 19.

B. As far as you know, about how many employees does (EMPLOYER) have working at all of its other locations-- under 1,000 employees, or 1,000 employees or more?

Under 1,000 employees 1

1,000 employees or more 2

DON'T KNOW 8

19. What hours do you usually work? Is it the regular day shift, the regular evening shift, the regular night shift, a split shift, or do your hours vary? CODE ONE ONLY.

Regular day shift 1
Regular evening shift 2
Regular night shift 3
A split shift 4
Hours vary 5
OTHER (SPECIFY)________________________6

20. How long does it usually take you to get from your home to work?

ENTER # OF MINUTES |__|__|__|

21. A. INTERVIEWER: IS R SELF EMPLOYED IN A BUSINESS WHICH IS UNINCORPORATED? (Q. 17B CODED 2 OR 8)

YES ....(SKIP TO Q. 23)..... 1

NO 2

B. INTERVIEWER: IS R ON ACTIVE DUTY IN THE MILITARY? (SEE ROW A ON CALENDAR)

YES....(SKIP TO Q.23) 1

NO 2

22. Does your employer make (READ CATEGORY) available to you? CODE "YES" OR "NO" FOR EACH.

	Yes	No
A. Medical, surgical, or hospital insurance that covers injuries or major illnesses off the job?	1	2
B. Life insurance that would cover your death for reasons not connected with your job?	1	2
C. Paid vacation?	1	2

23. HAND CARD H. We would like to know what kinds of opportunities this job offers you. (First/Next), how much opportunity does this job give you (READ CATEGORY)--a minimum amount, not too much, a moderate amount, quite a lot, or a maximum amount? (READ CATEGORIES 1-5 AND CODE FOR EACH.)

	A Minimum Amount	Not Too Much	A Moderate Amount	Quite A Lot	A Maximum Amount
1. To do a number of different things...	1	2	3	4	5
2. to deal with other people...	1	2	3	4	5
3. For independent thought or action...	1	2	3	4	5
4. To develop close friendships in your job...	1	2	3	4	5
5. To do a job from beginning to end--(PROBE IF NECESSARY: that is, the chance to do the whole job)	1	2	3	4	5

SEC 08

24. A. (CARD H) How much does your job give you the feeling that the job itself is very significant or important in the broader scheme of things--a minimum amount, not too much, a moderate amount, quite a lot, or a maximum amount?

A minimum amount	1
Not too much	2
A moderate amount	3
Quite a lot	4
A maximum amount	5

B. INTERVIEWER: IS R SELF EMPLOYED? (CODE 3 IN Q.17)

YES ....(SKIP TO Q. 26).........	1
NO ....(ASK C)..............	2

C. IF NO TO B: How much does your job give you the feeling that you know whether or not you are performing your job well or poorly--a minimum amount, not too much, a moderate amount, quite a lot, or a maximum amount? (CARD H)

A minimum amount	1
Not too much	2
A moderate amount	3
Quite a lot	4
A maximum amount	5

SEC 08

25. We would like to know how well or poorly each of the following statements describes your job. (First/Next), (READ CATEGORY). Thinking of your present job, would you say this is very true, somewhat true, not too true, or not at all true? HAND CARD I. THEN READ CATEGORIES 1-10 AND CODE FOR EACH.

	Very True	Somewhat True	Not Too True	Not At All True
1. You are given a chance to do the things you do best...	4	3	2	1
2. The physical surroundings are pleasant...	4	3	2	1
3. The skills you are learning would be valuable in getting a better job	4	3	2	1
4. The job is dangerous...	4	3	2	1
5. You are exposed to unhealthy conditions	4	3	2	1
6. The pay is good...	4	3	2	1
7. The job security is good...	4	3	2	1
8. Your co-workers are friendly...	4	3	2	1
9. Your supervisor is competent in doing the job...	4	3	2	1
10. The chances for promotion are good...	4	3	2	1

NOW SKIP TO Q. 27

ASK Q. 26 ONLY IF R IS SELF-EMPLOYED (SEE Q. 17).

26. We are interested in your opinion, as a self-employed person, of your job.

We would like to know how well or poorly each of the following statements describes your job. (First/Next), (READ CATEGORY). Thinking of your present job, would you say this is very true, somewhat true, not too true, or not at all true? HAND CARD I. THEN READ CATEGORIES 1-7 AND CODE FOR EACH.

	Very True	Somewhat True	Not Too True	Not At All True
1. You have the chance to do the things you do best...	4	3	2	1
2. The physical surroundings are pleasant...	4	3	2	1
3. The experiences you are gaining would also be valuable in getting another job or business...	4	3	2	1
4. The job is dangerous...	4	3	2	1
5. The business is stable...	4	3	2	1
6. You are exposed to unhealthy conditions	4	3	2	1
7. The income is good...	4	3	2	1

27. A. I'd like to get some idea of the kind of job you'd most like to have. If you were free to go into any type of job you wanted, what would you do? Would you take another job or keep the same job as you have now?

Take another job	1
Keep the same job	2
IF VOLUNTEERED:	
WOULD NOT WORK AT ALL	3

714

B. If you were to leave your current job, how difficult do you think it would be to find another job that was just as good -- extremely difficult, somewhat difficult, or not at all difficult? CODE ONE ONLY.

Extremely difficult 1
Somewhat difficult 2
Not at all difficult 3

28. A. How do you feel about the job you have now? Do you like it very much, like it fairly well, dislike it somewhat, or dislike it very much? CODE ONE ONLY.

Like it very much 1
Like it fairly well 2
Dislike it somewhat 3
Dislike it very much 4

B. INTERVIEWER: IS R CURRENTLY ON ACTIVE DUTY IN THE ACTIVE FORCES (SEE CALENDAR, ROW A)?

YES ...(SKIP TO SECTION 9, PAGE 77)... 1

NO 2

C. READ: We'll be asking some more questions later on in the interview about this job. Right now, we have some different questions.

NOW SKIP TO Q. 39

ASK Q.29 ONLY IF "NO" TO Q.8B.

29. A. INTERVIEWER: SEE Q.1:
WAS CATEGORY 3 "LOOKING FOR WORK" CODED?

YES ....(GO TO Q.30)............. 1

NO ....(ASK B) 2

B. IF NO: Have you been looking for work during the past 4 weeks?

Yes 1

No ....(SKIP TO Q.36) 2

SEC 08

30) What have you been doing in the last 4 weeks to find work? RECORD VERBATIM AND CODE ALL THAT APPLY.

____

____

____

NOTHING ....(SKIP TO Q.36)	01
CHECKED WITH:	
STATE EMPLOYMENT AGENCY	02
PRIVATE EMPLOYMENT AGENCY	03
EMPLOYER DIRECTLY	04
FRIENDS OR RELATIVES	05
PLACED OR ANSWERED ADS	06
LOOKED IN THE NEWSPAPER	07
SCHOOL EMPLOYMENT SERVICE	08
OTHER (SPECIFY) ____________________	09

31) Why did you start looking for work? Was it because you lost or quit a job at that time (PAUSE) or was there some other reason? RECORD VERBATIM AND CODE ONE ONLY.

____

____

____

LOST JOB	01
QUIT JOB	02
LEFT SCHOOL	03
CHILDREN ARE OLDER	04
ENJOY WORKING	05
HELP WITH FAMILY EXPENSES	06
WANTED TEMPORARY WORK	07
HEALTH IMPROVED	08
NEEDED MONEY	09
TO SUPPORT MYSELF	10
OTHER (SPECIFY)	11

32. INTERVIEWER: CODE:
ANSWER CODED IN Q.9 IS:

NEW JOB TO BEGIN .....(ASK Q.33)......	1
BLANK--Q.9 NOT ASKED ..(SKIP TO Q.34).	2

IF CODE 1 IN Q. 32, ASK Q. 33.

33. A. How many weeks ago did you start looking for work?

ENTER # OF WEEKS: |__|__|

B. Is your new job a full-time or a part-time job?

Full-time	1
Part-time	2

C. Is there any reason why you could not take a job last week?

Yes ....(ASK D)........	1
No ....(SKIP TO SECTION 9).......	2

D. IF YES TO C: What was the reason? RECORD VERBATIM AND CODE ONE ONLY.

____

____

____

ALREADY HAD A JOB	1
TEMPORARY ILLNESS	2
GOING TO SCHOOL	3
NEEDED AT HOME	4
OTHER (SPECIFY) ______________	5

NOW SKIP TO SECTION 9

IF CODE 2 IN Q. 32, ASK Q. 34.

34. A. How many weeks have you been looking for work?

ENTER # OF WEEKS: |__|__|

B. Have you been looking for full-time or part-time work?

Full-time	1
Part-time	2

35. Is there any reason why you could not take a job last week?

Yes ....(ASK A)	1
No ....(GO TO Q.39)	2

A. IF YES: What was the reason?
RECORD VERBATIM AND CODE ONE ONLY.

ALREADY HAD A JOB	1
TEMPORARY ILLNESS	2
GOING TO SCHOOL	3
NEEDED AT HOME	4
OTHER (SPECIFY BELOW).................	5

NOW SKIP TO Q. 39

36. Do you want a regular job now, either full- or part-time?

Yes .....(ASK A).....................	1
No ..... (ASK B)......................	2
MAYBE, IT DEPENDS......(ASK A)........	3
DON'T KNOW .....(ASK B)...............	8

SEC 08

A. IF YES OR MAYBE:
What are the reasons you are not looking for work?
RECORD VERBATIM AND CODE ALL THAT APPLY.

____

____

____

BELIEVE NO WORK AVAILABLE IN LINE OF WORK OR AREA	01
COULDN'T FIND ANY WORK	02
LACKS NECESSARY SCHOOLING TRAINING, SKILLS, OR EXPERIENCE	03
EMPLOYERS THINK TOO YOUNG	04
OTHER PERSONAL HANDICAPS IN FINDING JOB	05
CAN'T ARRANGE CHILD CARE	06
FAMILY RESPONSIBILITIES	07
IN SCHOOL OR OTHER TRAINING	08
ILL HEALTH, PHYSICAL DISABILITY	09
PREGNANCY	10
SPOUSE OR PARENTS AGAINST MY WORKING..	11
DOES NOT WANT DO WORK	12
CAN'T ARRANGE TRANSPORTATION..........	13
DON'T KNOW WHERE TO LOOK	14
OTHER (SPECIFY) __________________	15
OR	
DON'T KNOW	98

NOW GO TO Q.37

B. IF NO OR DON'T KNOW:
What are the reasons you do not want a regular job now?
RECORD VERBATIM AND CODE ALL THAT APPLY.

BELIEVE NO WORK AVAILABLE IN LINE OF WORK OR AREA	01
COULDN'T FIND ANY WORK	02
LACKS NECESSARY SCHOOLING TRAINING, SKILLS, OR EXPERIENCE	03
EMPLOYERS THINK TOO YOUNG	04
OTHER PERSONAL HANDICAPS IN FINDING JOB	05
CAN'T ARRANGE CHILD CARE	06
FAMILY RESPONSIBILITIES	07
IN SCHOOL OR OTHER TRAINING	08
ILL HEALTH, PHYSICAL DISABILITY	09
PREGNANCY	10
SPOUSE OR PARENTS AGAINST MY WORKING..	11
DOES NOT WANT DO WORK	12
CAN'T ARRANGE TRANSPORTATION..........	13
DON'T KNOW WHERE TO LOOK	14
OTHER (SPECIFY) ____________________	15
OR	
DON'T KNOW	98

37. **INTERVIEWER:** SEE HOUSEHOLD ENUMERATION AND CODE:
R IS

14-15 YEARS OLD
(SKIP TO SECTION 9) 1

16 YEARS OLD OR OLDER 2

38. Do you intend to look for work of any kind in the next 12 months?

Yes ....(GO TO Q. 47)................ 1

No .....(SKIP TO SECTION 9).......... 2

OR

IT DEPENDS (SPECIFY AND SKIP TO SECTION 9) ________________________ 3

OR

DON'T KNOW .(SKIP TO SECTION 9)....... 8

39.A. **INTERVIEWER:** SEE HOUSEHOLD ENUMERATION AND CODE:

R IS:

14-15 YEARS OLD (SKIP TO SECTION 9)......................... 1

16 YEARS OLD OR OLDER 2

B. INTERVIEWER: CODE:

R IS LOOKING FOR WORK (CODE 1 IN Q. 29A OR B)...(SKIP TO Q.46) 1

ALL OTHERS — INCLUDING Q.29A AND B NOT ASKED 2

40. Have you been looking for other work in the last 4 weeks?

Yes.......(ASK A).................... 1

No ....(ASK Qs.41 & 42) 2

A. IF YES: What have you been doing in the last four weeks to find work? RECORD VERBATIM AND CODE ALL THAT APPLY.

NOTHING ....(ASK QS.41 & 42).......... 01

CHECKED WITH:

STATE EMPLOYMENT AGENCY ....(SKIP TO Q. 43).............. 02

PRIVATE EMPLOYMENT AGENCY ....(SKIP TO Q. 43).............. 03

EMPLOYER DIRECTLY ....(SKIP TO Q. 43).............. 04

FRIENDS OR RELATIVES ....(SKIP TO Q. 43).............. 05

PLACED OR ANSWERED ADS ....(SKIP TO Q. 43).................. 06

LOOKED IN THE NEWSPAPER ....(SKIP TO Q. 43).................. 07

SCHOOL EMPLOYMENT SERVICE ....(SKIP TO Q. 43).................. 08

OTHER (SPECIFY AND SKIP TO Q. 43) ______________________ 09

IF NO TO Q.40 OR "NOTHING" IN Q.40A, ASK Q.41 & 42, OTHERWISE SKIP TO Q.43.

41. Do you intend to look for work of any kind in the next 12 months?

Yes 1
No 2

OR

IT DEPENDS (SPECIFY) ______________

______________________________ 3

OR
DON'T KNOW 8

42. A. Suppose someone in this area offered you a job in the same line of work you're in now. How much would the new job have to pay for you to be willing to take it? PROBE IF NECESSARY: Is that per hour, day, week, or what?

|__|__|__|__|__| . |__|__|
DOLLARS CENTS

Per hour 01
Per day 02
Per week 03
Bi-weekly
(every 2 weeks) 04
Per month 05
Per year 06
Other (SPECIFY)
______________ 07

OR, IF VOLUNTEERED:

ANY PAY 08

WOULDN'T TAKE IT AT ANY
CONCEIVABLE PAY
(SKIP TO SECTION 9)............ 09

B. How many days per week would you want to work?

ENTER # OF DAYS |__|__|
PER WEEK:

C. How many hours per day would you want to work?

ENTER # OF HOURS |__|__|
PER DAY:

NOW SKIP TO SECTION 9

43. What was the main reason you were looking for a new job during the past 4 weeks? RECORD VERBATIM AND CODE ONE ONLY.

____

____

____

LITTLE CHANCE FOR ADVANCEMENT IN CURRENT JOB 01

PAY INADEQUATE AT CURRENT JOB 02

WORKING CONDITIONS BAD AT CURRENT JOB 03

CURRENT JOB IS PART-TIME OR SEASONAL, DESIRE FULL-TIME WORK 04

CURRENT JOB DOES NOT MAKE GOOD USE OF MY EXPERIENCE OR SKILLS 05

WISH TO LIVE IN A NEW LOCATION 06

WANT JOB IN A DIFFERENT FIELD 07

OTHER (SPECIFY) ____________________ 08

44. For how many weeks have you been looking for a new job?

ENTER # OF WEEKS: |__|__|

45. What type of work are you looking for? CODE ONE ONLY.

ONE TYPE OF WORK (SPECIFY)____________________

____ 1

SEVERAL TYPES OF WORK.
PROBE: Which one would you prefer?
(SPECIFY)______________________________ 2

ANYTHING 3

| NOW SKIP TO Q.48 |

46. Earlier you said that you have been looking for work. What type of work are you looking for? CODE ONE ONLY.

ONE TYPE OF WORK (SPECIFY)__________________

____ 1

SEVERAL TYPES OF WORK.
PROBE: Which one would you prefer?
(SPECIFY)________________________________ 2

ANYTHING 3

|-----------------|
SKIP TO Q.48

47. Earlier you said that you intend to look for work in the next 12 months. What type of work will you be looking for? CODE ONE ONLY.

ONE TYPE OF WORK (SPECIFY)__________________

____ 1

SEVERAL TYPES OF WORK.
PROBE: Which one would you prefer?
(SPECIFY)________________________________ 2

ANYTHING 3

48. What would the wage or salary have to be for you to be willing to take it? PROBE IF NECESSARY: Is that per hour, day, week, or what?

|__|__|__|__|__| . |__|__|
DOLLARS CENTS

Per hour	01
Per day	02
Per week	03
Bi-weekly (every 2 weeks)	04
Per month	05
Per year	06
Other (SPECIFY) _______________	07
OR, IF VOLUNTEERED: ANY PAY	08

49. A. How many days per week (do/would) you want to work?

ENTER # OF DAYS PER WEEK: |__|__|

B. How many hours per day (do/would) you want to work?

ENTER # OF HOURS PER DAY: |__|__|

?

SECTION 9 ON JOBS

1. INTERVIEWER: CODE. R IS:

14 OR 15 YEARS OLD .(ANSWER A)...... 1

16 TO 22 YEARS OLD .(GO TO Q. 2).... 2

A. IF 14 OR 15 INTERVIEWER: DID R HAVE A JOB LAST WEEK (SEE EMPLOYER FLAP, COL 1)?

YES ....(SKIP TO Q. 6).. 1

NO ....(SKIP TO Q. 8).. 2

2. INTERVIEWER: DID R HAVE A JOB LAST WEEK (SEE EMPLOYER FLAP COLUMN 1) OR WAS R ON ACTIVE DUTY IN THE ACTIVE FORCES SINCE JAN. 1, 1978? (SEE CALENDAR)

YES ....(ASK A)........... 1

NO ....(GO TO Q.3)......... 2

A. IF YES: We're interested in all the (civilian) jobs you've had for pay since January 1, 1978, including work that was part of a school or government-sponsored program. Besides (the job you had last week/your military service), have you done any other work for pay since January 1, 1978?

Yes ....(SKIP TO Q.4)......... 1

No ....(SKIP TO Q. 6)........ 2

3. We're interested in any kind of (civilian) work you've done for pay since January 1, 1978, including work that was part of a school or government-sponsored program. Since January 1, 1978, have you done any work at all for which you were paid?

Yes 1

No ....(SKIP TO Q. 8)........ 2

4. Some jobs are odd jobs—that is, work done from time to time, like occasional lawnmowing or babysitting. Others are regular jobs, that is, jobs done on a more or less regular basis.

(Not counting the job you had last week,) Since January 1, 1978, have any of the jobs you've had for pay been done on a more or less regular basis?

Yes ....(GO TO Q. 5)......... 1

No ....(ANSWER A)........... 2

A. IF NO: INTERVIEWER, DID R HAVE A JOB LAST WEEK? (SEE EMPLOYER FLAP)

YES ....(SKIP TO Q. 6)........ 1

NO ....(SKIP TO Q. 8)........ 2

5. Please give me the names of each of your employers for all regular jobs you've had since January 1, 1978, (not counting the job you had last week). If you had more than one job at the same time, please tell me about each job separately. Let's start with the most recent regular job you've had.

LIST EMPLOYER NAMES IN COLUMNS 2-6 OF Q. 1 OF THE EMPLOYER FLAP, STARTING WITH THE MOST RECENT JOB.

PROBE: What was the name of your employer for the next most recent regular job you've had since January 1, 1978? CONTINUE PROBING UNTIL R SAYS "NO OTHER EMPLOYER."

IF R VOLUNTEERS THAT (HE/SHE) WORKED FOR MORE THAN ONE EMPLOYER FOR A JOB, ASK A. OTHERWISE, GO TO Q. 6.

A. During a single month, (do/did) you generally work for one employer or more than one employer for this job?

One employer . . . [ASK (1)] 1

More than one employer . . . . [ASK (2)] 2

(1) IF ONE EMPLOYER IN A: What (is/was) the name of the (next) most recent employer you've worked for on this job?

RECORD IN COLUMN HEADINGS OF A JOB SUPPLEMENT AND REASK THIS QUESTION UNTIL YOU GET "NO OTHER EMPLOYER," THEN GO TO Q. 6.

(2) IF MORE THAN ONE EMPLOYER IN A: RECORD "VARIETY OF EMPLOYERS" IN Q. 1 OF COLUMN HEADING IN THE JOB SUPPLEMENT. NOW GO TO Q. 6.

6. INTERVIEWER: SINCE JANUARY 1, 1978, HAS R BEEN ENROLLED IN REGULAR SCHOOL—THAT IS, IN GRADES 1-12, OR IN COLLEGE? (SEE CALENDAR: Q. 1 CODED 1, OR DATE IN Q. 2 AFTER JAN. 1, 1978)

YES 1

NO ....(SKIP TO Q. 14)....... 2

7. Some schools have cooperative work study programs in which students work part-time as part of their school programs--that is, the school gives time off or credit for the job. Since January 1, 1978, have you had a job that was part of a work-study program? Be sure to tell me if (one of) the job(s) you already told me about (REFER TO LIST OF EMPLOYERS) was this kind of job.

Yes ....(ASK A)............. 1

No ....(SKIP TO Q. 10)......... 2

A. IF YES: SHOW R THE EMPLOYER LIST AND ASK: What was the name of your employer for each work-study job you've had since January 1, 1978?

IF EMPLOYER WAS ALREADY ON THE LIST, CIRCLE CODE 2 AT Q. 2 FOR THIS JOB.

IF EMPLOYER WAS NOT ALREADY ON THE LIST, ADD THE EMPLOYER NAME(S) AND CIRCLE CODE 2 AT Q. 2 FOR THIS JOB.

NOW SKIP TO Q. 10

8. INTERVIEWER: AT ANY TIME SINCE JAN. 1, 1978, HAS R BEEN ENROLLED IN REGULAR SCHOOL--THAT IS, GRADES 1-12, OR IN COLLEGE? (SEE CALENDAR, Q. 1 CODED 1, OR DATE IN Q. 2 AFTER JAN. 1, 1978)

YES 1

NO ....(SKIP TO Q. 14)........ 2

9. Some schools have cooperative work study programs in which students work part-time as part of their school programs--that is, the school gives time off or credit for the job.

(Sometimes people forget to tell us about all of the jobs they've had.) Since January 1, 1978, have you had a job that was part of a work-study program?

Yes ....(ASK A).............. 1

No ....(GO TO Q. 10)........... 2

A. IF YES: What was the name of the employer for that job? PUT ON EMPLOYER LIST AND CIRCLE CODE 2 AT Q. 2 FOR THIS JOB.

10. INTERVIEWER: WAS R EVER ENROLLED IN COLLEGE? (BOX CHECKED IN Q. 3 ON CALENDAR)

YES ....(ASK A).............. 1

NO ....(SKIP TO Q. 11)......... 2

A. IF YES: Since Jan. 1, 1978, have you had a job that was provided by a college work-study program? [Be sure to tell me if (any of) the job(s) you told me about earlier (SHOW R EMPLOYER LIST) was one of these kinds of jobs.]

Yes ....(ASK B).............. 1

No ....(GO TO Q. 11)........... 2

B. IF YES TO A: [SHOW R EMPLOYER LIST AND ASK: What was the name of your employer for your college work-study job?

IF EMPLOYER WAS ALREADY ON THE LIST, CIRCLE CODE 3 AT Q. 3 FOR THIS JOB. THEN SKIP TO Q. 13.]

IF EMPLOYER WAS NOT ALREADY ON THE LIST, ADD THE EMPLOYER NAME(S) AND CIRCLE CODE 3 AT Q. 3. THEN SKIP TO Q. 13.

11. INTERVIEWER: IS AT LEAST ONE JOB ON THE EMPLOYER LIST?

YES 1

NO ....(SKIP TO Q. 13)........ 2

12. In some programs, the government provides part-time jobs for students during the school year. These jobs are often called the Neighborhood Youth Corps In-School program, and the In-School Work Experience program.

Since January 1, 1978, have you ever had a part-time job during the school year that was provided by the government? (PAUSE) Be sure to tell me if (any of) the job(s) you told me about earlier (SHOW R EMPLOYER LIST) was this kind of job.

Yes ....(ASK A).............. 1

No ....(SKIP TO Q. 14)......... 2

A. IF YES: SHOW R EMPLOYER LIST AND ASK: What was the name of your employer for any government-sponsored part-time job you've had since January 1, 1978?

IF EMPLOYER WAS ALREADY ON THE LIST, CIRCLE CODE 4 AT Q. 4 FOR THIS JOB.

IF EMPLOYER WAS NOT ALREADY ON THE LIST, ADD THE EMPLOYER NAME(S) AND CIRCLE CODE 4 AT Q. 4 FOR THIS JOB.

NOW SKIP TO Q. 14

13. In some (other) programs, the government provides part-time jobs for students during the school year. These jobs are often called the Neighborhood Youth Corps In-School program, and the In-School Work Experience program.

(Just to make sure we don't miss any jobs,) Since January 1, 1978 have you had any (other) part-time job during the school year that was provided by the government?

Yes ....(ASK A)............ 1

No ....(GO TO Q. 14)......... 2

A. IF YES: What was the name of your employer for that job? ADD TO EMPLOYER LIST AND CIRCLE CODE 4 AT Q. 4.

14. INTERVIEWER: IS THERE AT LEAST ONE JOB ON THE EMPLOYER LIST WITH NO CODE CIRCLED IN QS 2-4?

YES 1

NO ....(SKIP TO Q. 16)....... 2

15. There are (other) government-sponsored programs, such as CETA, that provide people with jobs. We would like to talk about a few of these (other) kinds of programs.

First, many programs provide jobs for about 10 weeks during the summer. The names of some are: The CETA Summer program, the NYC Summer program, the SPEDY program, and the Summer Youth Work Experience program.

Since January 1, 1978, have you had a government-sponsored summer job? (PAUSE) Be sure to tell me if (any of) the job(s) you told me about earlier (SHOW R EMPLOYER LIST) was this kind of summer job.

Yes ....(ASK A)............... 1

No ....(SKIP TO Q. 17).......... 2

A. IF YES: SHOW R EMPLOYER LIST AND ASK: What was the name of your employer for this government-sponsored summer job?

IF EMPLOYER WAS ALREADY ON THE LIST, CIRCLE CODE 5 AT Q. 5 FOR THIS JOB.

IF EMPLOYER WAS NOT ALREADY ON THE LIST, ADD THE EMPLOYER NAME AND CIRCLE CODE 5 AT Q. 5 FOR THIS JOB.

NOW SKIP TO Q. 17

16. There are (other) government-sponsored programs, such as CETA, that provide people with jobs. We would like to talk about a few of these (other) kinds of programs.

First, many programs provide jobs for about 10 weeks during the summer. The names of some are: The CETA Summer program, the NYC Summer program, the SPEDY program, and the Summer Youth Work Experience program.

(Just to make sure we haven't missed any job,) Since January 1, 1978, have you had a government-sponsored summer job?

Yes ....(ASK A)................ 1
No ....(GO TO Q. 17)........... 2

A. IF YES: What was the name of your employer for this job? PUT NAME OF EMPLOYER ON LIST AND CIRCLE CODE 5 AT Q. 5 FOR THIS EMPLOYER.

17. INTERVIEWER: IS R CURRENTLY ENROLLED IN GRADES 1-12? (SEE Q. 1 ON CALENDAR)

YES ....(SKIP TO Q. 21)........ 1

NO 2

18. INTERVIEWER: IS THERE AT LEAST ONE JOB ON THE EMPLOYER LIST WITH NO CODE CIRCLED FOR QS 2-5?

YES 1
NO ....(SKIP TO Q. 20)......... 2

19. In some government-sponsored programs, people are provided with a job or with on-the-job training. The names of some are: Public Service Employment, the Work Experience Program, the Young Adult Conservation Corps, the J.O.B.S. Program, and the O.J.T. Program.

Since January 1, 1978, have you had a job or on-the-job training that was sponsored by the government?

Be sure to tell me if (any of) the job(s) you already told me about was this kind of job.

Yes ....(ASK A)............. 1

No ....(SKIP TO Q. 21)........ 2

A. IF YES: SHOW R EMPLOYER LIST AND ASK: What was the name of your employer for this job?

IF EMPLOYER WAS ALREADY ON THE LIST, CIRCLE CODE 6 AT Q. 6 FOR THIS JOB.

IF EMPLOYER WAS NOT ALREADY ON THE LIST, ADD EMPLOYER NAME AND CIRCLE CODE 6 AT Q. 6 FOR THIS JOB.

NOW SKIP TO Q. 21

20. In some government-sponsored programs, people are provided with a job or with on-the-job training. The names of some are: Public Service Employment, the Work Experience Program, the Young Adult Conservation Corps, the J.O.B.S. Program, and the O.J.T. Program.

(Just to make sure we don't miss any jobs,) Since January 1, 1978, have you had a job or on-the-job training that was sponsored by the government?

Yes ....(ASK A).............. 1

No ....(GO TO Q. 21)......... 2

A. IF YES: What was the name of your employer for this job? PUT THE NAME OF THE EMPLOYER ON LIST AND CIRCLE CODE 6 AT Q. 6 FOR THIS EMPLOYER.

21. INTERVIEWER: IS THERE AT LEAST ONE JOB WITH NO CODE CIRCLED FOR QS 2-6?

YES 1

NO ....(SKIP TO Q. 23)........ 2

22. HAND CARD J. Finally, take a look at this card. Since January 1, 1978, have you had a job that was sponsored by the kinds of government programs listed here? (PAUSE) Again, be sure to tell me if (any of) the job(s) you already told me about was part of one of these programs.

Yes ....(ASK A)............... 1

No ....(SKIP TO Q. 24)......... 2

A. IF YES: SHOW R EMPLOYER LIST AND ASK: What was the name of your employer for this job?

IF EMPLOYER WAS ALREADY ON THE LIST, CIRCLE CODE 7 AT Q. 7 FOR THIS JOB.

IF EMPLOYER WAS NOT ALREADY ON THE LIST, ADD THE EMPLOYER NAME AND CIRCLE CODE 7 AT Q. 7 FOR THIS JOB.

NOW SKIP TO Q. 24

23. HAND CARD J. Finally, please take a look at this card. Since January 1, 1978, have you had a job that was sponsored by the kinds of government programs listed here?

Yes ....(ASK A)............. 1

No ....(GO TO Q. 24).......... 2

A. IF YES: What was the name of your employer for this job? PUT NAME OF EMPLOYER ON LIST AND CIRCLE CODE 7 AT Q. 7 FOR THIS EMPLOYER.

24. Now we have just a few questions about jobs you may have had before January 1, 1978.

At any time before 1978, did you have any part-time job for pay that was part of your school program, in which you got time off or credit in school for working?

Yes ....(ASK A).............. 1

No ....(GO TO Q. 25)........... 2

A. IF YES: Please tell me when you had this kind of part-time job as part of your school program--I just need the months and years.

	FROM:		TO:	
	MONTH	YEAR	MONTH	YEAR
1.	|__|__|	|__|__|	|__|__|	|__|__|
2.	|__|__|	|__|__|	|__|__|	|__|__|
3.	|__|__|	|__|__|	|__|__|	|__|__|
4.	|__|__|	|__|__|	|__|__|	|__|__|

25. **HAND CARD K.** At any time before 1978, did you have any of the kinds of government-sponsored jobs we've been talking about? For example, a part-time job while you were in school, a summer job, or any other kind of job sponsored by the kinds of government programs listed on this card?

Yes ....(ASK A & B)......... 1

No ....(GO TO Q. 26)....... 2

A. For each government-sponsored job you had before 1978, please tell me the name of the government program that sponsored that job. PROBE: What others?

FOR EACH PROGRAM LISTED IN A, ASK B:

B. When did you have a job sponsored by (NAME OF PROGRAM)?

NAMES OF GOVERNMENT PROGRAMS	OFFICE USE	FROM MONTH	FROM YEAR	TO MONTH	TO YEAR
1. ____________________	|__|__|	|__|__|	|__|__|	|__|__|	|__|__|
2. ____________________	|__|__|	|__|__|	|__|__|	|__|__|	|__|__|
3. ____________________	|__|__|	|__|__|	|__|__|	|__|__|	|__|__|
4. ____________________	|__|__|	|__|__|	|__|__|	|__|__|	|__|__|
5. ____________________	|__|__|	|__|__|	|__|__|	|__|__|	|__|__|

26. **INTERVIEWER:** ARE ANY EMPLOYERS LISTED ON THE EMPLOYER FLAP?

YES ....(ADMINISTER SECTION 10)..... 1
NO .....(SKIP TO SECTION 11)........ 2

?

SECTION 10 JOBS

You told me that you worked for (NAME OF EMPLOYER). We would (also) like to ask you some (additional) questions about your job with this employer.

1. When did you first start working for (EMPLOYER)?	MONTH |__|__| DAY |__|__| YEAR 19|__|__|	MONTH |__|__| DAY |__|__| YEAR 19|__|__|
2. Are you currently working for (EMPLOYER)?	Yes ..(ANSWER A).. 1 No ..(ASK B & C).. 2	Yes ..(ANSWER A).. 1 No ..(ASK B & C).. 2

IF YES, ANSWER A:

A. INTERVIEWER: ENTER INTERVIEW DATE IN ROW B OF CALENDAR. DRAW LINE IN ROW A ON CALENDAR FROM (DATE BEGAN/JAN. 1, 1978) TO PRESENT DATE. LABEL THE LINE WITH THE NAME OFTHE EMPLOYER. THEN GO TO Q. 3.

IF NO, ASK B & C:

B. When did you last stop working for (EMPLOYER)? ENTER IN ROW B OF CALENDAR IN APPROPRIATE MONTH AND HERE. DRAW A LINE FROM (DATE BEGAN/ JAN. 1, 1978) TO DATE STOPPED. LABEL THE LINE WITH THE NAME OF THE EMPLOYER.	MONTH |__|__| DAY |__|__| YEAR 19|__|__|	MONTH |__|__| DAY |__|__| YEAR 19|__|__|

MONTH __ __	MONTH __ __	MONTH __ __
DAY __ __	DAY __ __	DAY __ __
YEAR 19 __ __	YEAR 19 __ __	YEAR 19 __ __
Yes ..(ANSWER A).. 1	Yes ..(ANSWER A).. 1	Yes ..(ANSWER A).. 1
No ..(ASK B & C).. 2	No ..(ASK B & C).. 2	No ..(ASK B & C).. 2

MONTH __ __	MONTH __ __	MONTH __ __
DAY __ __	DAY __ __	DAY __ __
YEAR 19 __ __	YEAR 19 __ __	YEAR 19 __ __

C. Why did you happen to leave this job? RECORD VERBATIM AND ENTER APPROPRIATE CODE. IF MORE THAN ONE REASON GIVEN, PROBE: What was the one main reason?

INVOLUNTARY REASONS:

LAYOFF, PLANT CLOSED, OR END OF TEMPORARY OR SEASONAL JOB 01
DISCHARGED OR FIRED 02
PROGRAM ENDED 03

VOLUNTARY REASONS:

QUIT BECAUSE FOUND A BETTER JOB 04
QUIT BECAUSE OF EMPLOYMENT CONDITIONS (DIDN'T LIKE WORK, HOURS, WORKING CONDITIONS, OR LOCATION, DIDN'T GET ALONG WITH OTHER EMPLOYEES OR BOSS) 05
QUIT BECAUSE WAGES TOO LOW 06
QUIT DUE TO OWN ILLNESS, DISABILITY 07
QUIT BECAUSE INTERFERRED WITH SCHOOL 08
QUIT TO ENTER ARMED FORCES 09
PREGNANCY 10
HUSBAND OR WIFE CHANGED JOBS AND/OR MOVED 11
MOTHER OR FATHER CHANGED JOBS AND/OR MOVED 12
FAMILY REASONS (TO GET MARRIED, TO CARE FOR CHILDREN, ILLNESS OF OTHER FAMILY MEMBERS).. 13
OTHER (SPECIFY) 14

________________	________________
________________	________________
________________	________________
________________	________________
ENTER CODE: |__|__|	ENTER CODE: |__|__|
IF CODE 14, SPECIFY BELOW:	IF CODE 14, SPECIFY BELOW:
________________	________________
________________	________________
________________	________________

3. How many hours per week (do/did) you usually work at this job? ENTER # OF HOURS:

|__|__| HOURS	|__|__| HOURS
NOW SKIP TO Q. 7	CONTINUE AT Q. 4

____

____

____

____

```
             |--|--|
ENTER CODE:  |__|__|
```

IF CODE 14,
SPECIFY BELOW:

____

____

____

```
|--|--|
|__|__|
 HOURS
```

CONTINUE AT Q. 4

____

____

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             |--|--|
ENTER CODE:  |__|__|
```

IF CODE 14,
SPECIFY BELOW:

____

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|--|--|
|__|__|
 HOURS
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CONTINUE AT Q. 4

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             |--|--|
ENTER CODE:  |__|__|
```

IF CODE 14,
SPECIFY BELOW:

____

____

____

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|--|--|
|__|__|
 HOURS
```

CONTINUE AT Q. 4

ANSWER QS 4-7 FOR COLUMNS 2-5 ONLY.
IF COLUMN 1, SKIP TO Q.7 .

4.	INTERVIEWER: IS CODE 4-7 ON THE FLAP CIRCLED FOR THIS JOB?	///////////////////// /////////////////////	YES (SKIP TO Q. 7) 1 NO 2
5.	INTERVIEWER: HOW OLD IS R? (SEE SECTION 1, Q. 1B)	///////////////////// ///////////////////// ///////////////////// ///////////////////// ///////////////////// ///////////////////// /////////////////////	14-15 YEARS OLD (GO TO NEXT EMPLOYER OR SECTION 11, PAGE 112)........ 1 16-22 YEARS OLD .. 2
6A.	INTERVIEWER: DID R WORK ON THIS JOB LESS THAN 20 HOURS A WEEK OR 20 HOURS OR MORE A WEEK? (SEE Q. 3)	///////////////////// ///////////////////// ///////////////////// ///////////////////// ///////////////////// ///////////////////// ///////////////////// /////////////////////	LESS THAN 20 HOURS A WEEK (GO TO Q 9) .... 1 20 HOURS OR MORE A WEEK 2
6B.	INTERVIEWER: DID R WORK AT THIS JOB LESS THAN 9 WEEKS OR 9 WEEKS OR MORE? (SEE QS 1 & 2A. IF NECESSARY, SEE CALENDAR FOR WEEK NUMBERS)	///////////////////// ///////////////////// ///////////////////// ///////////////////// ///////////////////// ///////////////////// /////////////////////	LESS THAN 9 WEEKS (GO TO Q 9) .... 1 9 WEEKS OR MORE .. 2
7.	And how many hours per day (do/did) you usually work at this job? ENTER # OF HOURS:	|__|__| HOURS	|__|__| HOURS
8.	INTERVIEWER: SEE Q. 1. WAS DATE ENTERED BEFORE JAN. 1, 1978?	YES ..(ASK A)..... 1 NO (SKIP TO Q.9).. 2	YES ..(ASK A)..... 1 NO (SKIP TO Q.9).. 2
	IF YES, ASK A: A. Before Jan. 1, 1978, were there any periods of one month or more during which you were not working for (EMPLOYER), not counting paid vacation or paid sick leave?	YES ..(ASK B&C)... 1 NO ...(GO TO C)... 2	YES ..(ASK B&C)... 1 NO ...(GO TO C)... 2
	B. IF YES TO A: What is the total number of months that you did work for (EMPLOYER) before Jan. 1, 1978? ENTER # OF MONTHS:	|__|__| MONTHS	|__|__| MONTHS
	C. For all of the rest of the questions we have about (EMPLOYER), please think only of the time you worked for (EMPLOYER) since Jan. 1, 1978.		

7.10

YES (SKIP TO Q. 7) 1 NO 2	YES (SKIP TO Q. 7) 1 NO 2	YES (SKIP TO Q. 7) 1 NO 2
14-15 YEARS OLD (GO TO NEXT EMPLOYER OR SECTION 11, PAGE)........ 1	14-15 YEARS OLD (GO TO NEXT EMPLOYER OR SECTION 11, PAGE)........ 1	14-15 YEARS OLD (GO TO NEXT EMPLOYER OR SECTION 11, PAGE 112)........ 1
16-22 YEARS OLD .. 2	16-22 YEARS OLD .. 2	16-22 YEARS OLD .. 2
LESS THAN 20 HOURS A WEEK (GO TO Q 9) 1	LESS THAN 20 HOURS A WEEK (GO TO Q 9) 1	LESS THAN 20 HOURS A WEEK (GO TO Q 9) 1
20 HOURS OR MORE A WEEK 2	20 HOURS OR MORE A WEEK 2	20 HOURS OR MORE A WEEK 2
LESS THAN 9 WEEKS (GO TO Q 9) 1	LESS THAN 9 WEEKS (GO TO NEXT EMPLOYER OR SECTION 11, PAGE)........ 1	LESS THAN 9 WEEKS (GO TO Q 9) 1
9 WEEKS OR MORE .. 2	9 WEEKS OR MORE .. 2	9 WEEKS OR MORE .. 2
|--|--| |__|__| HOURS	|--|--| |__|__| HOURS	|--|--| |__|__| HOURS
YES ..(ASK A)..... 1 NO (SKIP TO Q.9).. 2	YES ..(ASK A)..... 1 NO (SKIP TO Q.9).. 2	YES ..(ASK A)..... 1 NO (SKIP TO Q.9).. 2
YES ..(ASK B&C)... 1 NO ...(GO TO C)... 2	YES ..(ASK B&C)... 1 NO ...(GO TO C)... 2	YES ..(ASK B&C)... 1 NO ...(GO TO C)... 2
|--|--| |__|__| MONTHS	|--|--| |__|__| MONTHS	|--|--| |__|__| MONTHS

9. For one reason or another, people often do not work for a week, a month, or even longer. For example, strikes, layoffs, and extended illnesses can cause people to miss work for a week or longer.

SHOW R CALENDAR

Between (DATE STARTED/Jan. 1, 1978) and (DATE JOB ENDED/ now), were there any periods of a full week or more during which you did not work for this employer, not counting paid vacations and paid sick leave?	YES ..(ASK Q. 10). 1 NO (SKIP TO Q. 15) 2	YES ..(ASK Q. 10). 1 NO (SKIP TO Q. 10F) 2

YES ..(ASK Q. 10). 1	YES ..(ASK Q. 10). 1	YES ..(ASK Q. 10). 1
NO (SKIP TO Q. 10F) 2	NO (SKIP TO Q. 10F) 2	NO (SKIP TO Q.10F) 2

IF YES, ASK Q. 10:

10A. Please show me on this calendar each period (since Jan. 1, 1978) during which you didn't work for this employer for a full week or more. PROBE: What other period was there during which you didn't work for this employer for a full week or more?

INDICATE ON ROW B OF CALENDAR DATE STARTED AND ENDED EACH PERIOD OF NOT WORKING FOR THIS EMPLOYER. THEN ENTER DATES IN "A" HERE, MOST RECENT FIRST. IF MORE THAN 4 SUCH PERIODS, ENTER IN "A" THE 4 MOST RECENT PERIODS AND ENTER THE TOTAL NUMBER HERE: |__|__|

(OFFICE USE) |__|__|

FOR EACH SET OF DATES ENTERED IN Q. 10, ASK B-E:

B(1) You said that you were not working for (EMPLOYER) between (READ DATES IN Q. 10). HAND CARD L. Which of the categories listed on this card best describes the main reason why you were not working for (EMPLOYER) during this period of time? IF REASONS 1-4, ENTER ONE CODE IN B. IF REASON 5, ASK B(2).

CARD L

1) On strike	01
2) On layoff	02
3) Quit job but returned later to same employer .	03
4) Job ended for a period of time but later began again	04
5) Some other reason for which went on unpaid vacation or unpaid leave [ASK B(2)]	

FOR EACH REASON 5, ASK B(2):

B(2) What was the reason you were on unpaid vacation or unpaid leave? HAND CARD M. RECORD REASON CODE IN B.

CARD M

6) Going to school	06
7) Armed forces	07
8) Pregnancy	08
9) I had health problems	09
10) Problems with child care .	10
11) Other personal or family reasons	11
12) (For school employees only) School shut down	12
13) Did not want to work	13
14) Other reason (ASK C)......	14

FOR EACH REASON CODE 14 IN B, ASK C:

C. What was the reason?

PERIOD 1

FROM

A. |__|__|__|__|__|__|
MONTH DAY YEAR

TO

|__|__|__|__|__|__|
MONTH DAY YEAR

B. REASON CODE |__|__|

C. IF CODE 14, SPECIFY: ________________

PERIOD 2

FROM

A. |__|__|__|__|__|__|

MONTH DAY YEAR

TO

|__|__|__|__|__|__|
MONTH DAY YEAR

B. REASON CODE |__|__|

C. IF CODE 14, SPECIFY: ________________

PERIOD 3

FROM

A. |__|__|__|__|__|__|
MONTH DAY YEAR

TO

|__|__|__|__|__|__|
MONTH DAY YEAR

B. REASON CODE |__|__|

C. IF CODE 14, SPECIFY: ________________

PERIOD 4

FROM

A. |__|__|__|__|__|__|
MONTH DAY YEAR

TO

|__|__|__|__|__|__|
MONTH DAY YEAR

B. REASON CODE |__|__|

C. IF CODE 14, SPECIFY: ________________

PERIOD 1

FROM

A. |__|__|__|__|__|__|
MONTH DAY YEAR

TO

|__|__|__|__|__|__|
MONTH DAY YEAR

B. REASON CODE |__|__|

C. IF CODE 14, SPECIFY: ________________

PERIOD 2

FROM

A. |__|__|__|__|__|__|

MONTH DAY YEAR

TO

|__|__|__|__|__|__|
MONTH DAY YEAR

B. REASON CODE |__|__|

C. IF CODE 14, SPECIFY: ________________

PERIOD 3

FROM

A. |__|__|__|__|__|__|
MONTH DAY YEAR

TO

|__|__|__|__|__|__|
MONTH DAY YEAR

B. REASON CODE |__|__|

C. IF CODE 14, SPECIFY: ________________

PERIOD 4

FROM

A. |__|__|__|__|__|__|
MONTH DAY YEAR

TO

|__|__|__|__|__|__|
MONTH DAY YEAR

B. REASON CODE |__|__|

C. IF CODE 14, SPECIFY: ________________

PERIOD 1
FROM
A. |--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

TO
|--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

|--|--|
B. REASON CODE |__|__|

C. IF CODE 14,
SPECIFY:
____

PERIOD 2
FROM
A. |--|--|--|--|--|--|
|__|__|__|__|__|__|

MONTH DAY YEAR

TO
|--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

|--|--|
B. REASON CODE |__|__|

C. IF CODE 14,
SPECIFY:
____

PERIOD 3
FROM
A. |--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

TO
|--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

|--|--|
B. REASON CODE |__|__|

C. IF CODE 14,
SPECIFY:
____

PERIOD 4
FROM
A. |--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

TO
|--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

|--|--|
B. REASON CODE |__|__|

C. IF CODE 14,
SPECIFY:
____

PERIOD 1
FROM
A. |--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

TO
|--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

|--|--|
B. REASON CODE |__|__|

C. IF CODE 14,
SPECIFY:
____

PERIOD 2
FROM
A. |--|--|--|--|--|--|
|__|__|__|__|__|__|

MONTH DAY YEAR

TO
|--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

|--|--|
B. REASON CODE |__|__|

C. IF CODE 14,
SPECIFY:
____

PERIOD 3
FROM
A. |--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

TO
|--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

|--|--|
B. REASON CODE |__|__|

C. IF CODE 14,
SPECIFY:
____

PERIOD 4
FROM
A. |--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

TO
|--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

|--|--|
B. REASON CODE |__|__|

C. IF CODE 14,
SPECIFY:
____

PERIOD 1
FROM
A. |--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

TO
|--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

|--|--|
B. REASON CODE |__|__|

C. IF CODE 14,
SPECIFY:
____

PERIOD 2
FROM
A. |--|--|--|--|--|--|
|__|__|__|__|__|__|

MONTH DAY YEAR

TO
|--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

|--|--|
B. REASON CODE |__|__|

C. IF CODE 14,
SPECIFY:
____

PERIOD 3
FROM
A. |--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

TO
|--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

|--|--|
B. REASON CODE |__|__|

C. IF CODE 14,
SPECIFY:
____

PERIOD 4
FROM
A. |--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

TO
|--|--|--|--|--|--|
|__|__|__|__|__|__|
MONTH DAY YEAR

|--|--|
B. REASON CODE |__|__|

C. IF CODE 14,
SPECIFY:
____

10. D. FOR REASON CODES 03 OR 04, ERASE PORTION OF LINE ON CALENDAR FOR THIS EMPLOYER WHEN R WAS NOT WORKING.

FOR ALL OTHER REASON CODES, DRAW IN YELLOW OVER PORTIONS OF LINE FOR THIS EMPLOYER WHEN R WAS NOT WORKING.

10. E. IF ANY ADDITIONAL SETS OF DATES IN A FOR WHICH YOU HAVE NOT ASKED B & C, GO BACK AND ASK B & C ABOUT THEM NOW.

10.F. INTERVIEWER: SEE QS 6A & 6B. WAS CODE 1 CIRCLED FOR EITHER OF THESE QUESTIONS?	/////////////////////	YES (GO TO NEXT EMPLOYER OR TO SECTION 11, PAGE 112) ...... 1 NO 2
ASK QS 11-14 FOR COLUMNS 2-5 ONLY. FOR COLUMN 1, SKIP TO Q. 15.		
11. What kind of work did you usually do for (EMPLOYER)? IF MORE THAN ONE KIND OF WORK, PROBE: What kind of work did you do the longest for (EMPLOYER)? RECORD VERBATIM.	/////////////////////	________________ ________________ ________________
12. What were some of your main activities or duties? RECORD VERBATIM.	/////////////////////	________________ ________________ ________________
13. What kind of business or industry was this? PROBE: What do they make or do? RECORD VERBATIM.	/////////////////////	________________ ________________ ________________
14. HAND CARD N. Were you (READ CATEGORIES)	/////////////////////	An employee of a private company, business, or individual for wages, salary, or commission.. (GO TO Q.15)..... 1 A government employee (ASK A). 2 Self-employed in own business, professional practice, or farm.....(ASK B). 3 Working without pay in family business or farm (GO TO Q.15) 4

YES (GO TO NEXT EMPLOYER OR TO SECTION 11, PAGE 112) 1	YES (GO TO NEXT EMPLOYER OR TO SECTION 11, PAGE 112) 1	YES (GO TO NEXT EMPLOYER OR TO SECTION 11, PAGE 112) 1
NO 2	NO 2	NO 2
____________________	____________________	____________________
____________________	____________________	____________________
____________________	____________________	____________________
____________________	____________________	____________________
____________________	____________________	____________________
____________________	____________________	____________________
____________________	____________________	____________________
____________________	____________________	____________________
____________________	____________________	____________________
An employee of a private company, business, or individual for wages, salary, or commission.. (GO TO Q.15)..... 1	An employee of a private company, business, or individual for wages, salary, or commission.. (GO TO Q.15)..... 1	An employee of a private company, business, or individual for wages, salary, or commission.. (GO TO Q.15)..... 1
A government employee (ASK A). 2	A government employee (ASK A). 2	A government employee (ASK A). 2
Self-employed in own business, professional practice, or farm.....(ASK B). 3	Self-employed in own business, professional practice, or farm.....(ASK B). 3	Self-employed in own business, professional practice, or farm.....(ASK B). 3
Working without pay in family business or farm (GO TO Q.15) 4	Working without pay in family business or farm (GO TO Q.15) 4	Working without pay in family business or farm (GO TO Q.15) 4

IF CODE 2 IN Q. 14, ASK A: A. Were you an employee of the federal government, state government, or local government?	//////////////////// //////////////////// //////////////////// //////////////////// //////////////////// //////////////////// //////////////////// //////////////////// //////////////////// //////////////////// //////////////////// //////////////////// //////////////////// ////////////////////	Federal government employee ... 1 State government employee .... 2 Local government employee .... 3 DON'T KNOW .... 8 GO TO Q. 15
IF CODE 3 IN Q. 14, ASK B: B. Was your business incorporated or unincorporated?	//////////////////// //////////////////// //////////////////// //////////////////// //////////////////// //////////////////// ////////////////////	Business incorporated .... 1 Business unincorporated .. 2 DON'T KNOW 8
15. Altogether, including tips, overtime, and bonuses, how much (do/did) you usually earn at that job? Please give me the amount you earn before deductions like taxes and Social Security are taken out. ENTER IN APPROPRIATE BOXES. PROBE IF NECESSARY: Was that per hour, per day, per week, or what?	|__|__|,|__|__|__| DOLLARS AND |__|__| CENTS Per hour .... 1 Per day .... 2 Per week .... 3 Bi-Weekly .... 4 Per month .... 5 Per year .... 6 OTHER (SPECIFY) ________________ 7	|__|__|,|__|__|__| DOLLARS AND |__|__| CENTS Per hour .... 1 Per day .... 2 Per week .... 3 Bi-Weekly .... 4 Per month .... 5 Per year .... 6 OTHER (SPECIFY) ________________ 7
16. INTERVIEWER: IS THIS JOB WITHOUT PAY IN A FAMILY BUSINESS OR FARM? (CODE 4 IN Q. 14)	YES (GO TO NEXT EMPLOYER OR SECTION 11, PAGE 112)......... 1 NO 2	YES (GO TO NEXT EMPLOYER OR SECTION 11, PAGE 112)......... 1 NO 2

Federal government employee ... 1	Federal government employee ... 1	Federal government employee ... 1
State government employee 2	State government employee 2	State government employee 2
Local government employee 3	Local government employee 3	Local government employee 3
DON'T KNOW 8	DON'T KNOW 8	DON'T KNOW 8
GO TO Q. 15	GO TO Q. 15	GO TO Q. 15
Business incorporated 1	Business incorporated 1	Business incorporated 1
Business unincorporated .. 2	Business unincorporated .. 2	Business unincorporated .. 2
DON'T KNOW 8	DON'T KNOW 8	DON'T KNOW 8
__ __ , __ __ __ DOLLARS	__ __ , __ __ __ DOLLARS	__ __ , __ __ __ DOLLARS
AND __ __ CENTS	AND __ __ CENTS	AND __ __ CENTS
Per hour 1	Per hour 1	Per hour 1
Per day 2	Per day 2	Per day 2
Per week 3	Per week 3	Per week 3
Bi-Weekly 4	Bi-Weekly 4	Bi-Weekly 4
Per month 5	Per month 5	Per month 5
Per year 6	Per year 6	Per year 6
OTHER (SPECIFY) ________________ 7	OTHER (SPECIFY) ________________ 7	OTHER (SPECIFY) ________________ 7
YES (GO TO NEXT EMPLOYER OR SECTION 11, PAGE 112) 1	YES (GO TO NEXT EMPLOYER OR SECTION 11, PAGE 112) 1	YES (GO TO NEXT EMPLOYER OR SECTION 11, PAGE 112) 1
NO 2	NO 2	NO 2

17. (Are/Were) your wages or salary on this job set by a collective bargaining agreement between your employer and a union or employee association?	Yes ..(ASK A-C)... 1 No .(GO TO Q.18).. 2	Yes ..(ASK A-C)... 1 No .(GO TO Q.18).. 2
IF YES, ASK A-C: HAND CARD O. A. What (is/was) the name of this union or employee association? PROBE FOR AND RECORD COMPLETE NAME. ENTER CODE IF POSSIBLE.	__________________ ENTER CODE: |__|__|__| IF CODE 996, SPECIFY: __________________ OR DON'T KNOW 998	__________________ ENTER CODE: |__|__|__| IF CODE 996, SPECIFY: __________________ OR DON'T KNOW 998
B. (Are/Were) you a member of that union or employee association?	Yes .... 1 No 2	Yes .... 1 No 2

Amalgamated Meat Cutters and Butcher Workmen 102
American Federtion of State, County, and Municipal Employees (AFSCME) 169
Communication Workers of America (CWA)........ 032
Hotel and Restaurant Employees and Bartenders International Union 068
International Association of Machinists and Aerospace Workers (Machinists) 094
International Brotherhood of Electrical Workers (IBEW) 044
International Brotherhood of Teamsters 173
Laborers International Union of North America . 079
Retail Clerks International Association 154
Service Employees International Union 162
United Automobile Workers of America (UAW) 013
United Brotherhood of Carpenters and Joiners of America 024
United Steel Workers of America 170
OTHER (SPECIFY) 996
OR
DON'T KNOW 998

Yes ..(ASK A-C)... 1	Yes ..(ASK A-C)... 1	Yes ..(ASK A-C)... 1
No .(GO TO Q.18).. 2	No .(GO TO Q.18).. 2	No .(GO TO Q.18).. 2
______________	______________	______________
ENTER CODE: |__|__|__|	ENTER CODE: |__|__|__|	ENTER CODE: |__|__|__|
IF CODE 996, SPECIFY: ______________	IF CODE 996, SPECIFY: ______________	IF CODE 996, SPECIFY: ______________
OR DON'T KNOW 998	OR DON'T KNOW 998	OR DON'T KNOW 998
Yes 1	Yes 1	Yes 1
No 2	No 2	No 2

C. **INTERVIEWER:** IS R CURRENTLY EMPLOYED AT THIS JOB? (SEE Q. 2)	YES .(GO TO Q.18). 1 NO ....(ASK D).... 2	YES .(GO TO Q.18). 1 NO ....(ASK D).... 2
D. IF NO TO C: Are you currently a member of that union or employee association?	Yes .... 1 No 2	Yes .... 1 No 2
18. **INTERVIEWER:** IS ONE OR MORE OF CODES 4-7 CIRCLED ON THE FLAP FOR THIS JOB?	YES (CONTINUE BELOW)........... 1 NO (GO TO NEXT EMPLOYER OR SECTION 11, PAGE 112)......... 2	YES (CONTINUE BELOW)........... 1 NO (GO TO NEXT EMPLOYER OR SECTION 11, PAGE 112)......... 2
19. You told me earlier that this job (is/was) part of a government-sponsored program. What was the name of the government program that sponsored this job? RECORD VERBATIM.	____________________ ____________________ ____________________ OFFICE USE: |__|__|	____________________ ____________________ ____________________ OFFICE USE: |__|__|
20. A. As far as you know, (is/was) this job part of a CETA Program?	Yes .... 1 No 2	Yes .... 1 No 2
B. As far as you know, (is/was) this job (also) part of a WIN Program?	Yes .... 1 No 2	Yes .... 1 No 2
21. Why did you decide to enter this program? RECORD VERBATIM AND CODE ONE ONLY. IF MORE THAN ONE REASON, PROBE: Which one of these reasons was the most important to you?	____________________ ____________________ ____________________ TO MAKE MONEY ... 01 TO GET A BETTER JOB THAN COULD GET ON OWN ..... 02 TO GET A JOB .... 03 TO GET JOB TRAINING OR EXPERIENCE ..... 04 TO HAVE SOMETHING TO DO .... 05 THE PROGRAM ACTIVITIES SOUNDED INTERESTING .... 06 OTHER (SPECIFY) ________________ 08	____________________ ____________________ ____________________ TO MAKE MONEY ... 01 TO GET A BETTER JOB THAN COULD GET ON OWN ..... 02 TO GET A JOB .... 03 TO GET JOB TRAINING OR EXPERIENCE ..... 04 TO HAVE SOMETHING TO DO .... 05 THE PROGRAM ACTIVITIES SOUNDED INTERESTING .... 06 OTHER (SPECIFY) ________________ 08

YES .(GO TO Q.18). 1 NO ....(ASK D).... 2	YES .(GO TO Q.18). 1 NO ....(ASK D).... 2	YES .(GO TO Q.18). 1 NO ....(ASK D).... 2
Yes .... 1 No 2	Yes .... 1 No 2	Yes .... 1 No 2
YES (CONTINUE BELOW)........... 1 NO (GO TO NEXT EMPLOYER OR SECTION 11, PAGE 112)......... 2	YES (CONTINUE BELOW)........... 1 NO (GO TO NEXT EMPLOYER OR SECTION 11, PAGE 112)......... 2	YES (CONTINUE BELOW)........... 1 NO (GO TO NEXT EMPLOYER OR SECTION 11, PAGE 112)......... 2
____________ ____________ ____________	____________ ____________ ____________	____________ ____________ ____________
OFFICE USE: |__|__|	OFFICE USE: |__|__|	OFFICE USE: |__|__|
Yes .... 1 No 2	Yes .... 1 No 2	Yes .... 1 No 2
Yes .... 1 No 2	Yes .... 1 No 2	Yes .... 1 No 2
____________ ____________ ____________	____________ ____________ ____________	____________ ____________ ____________
TO MAKE MONEY ... 01 TO GET A BETTER JOB THAN COULD GET ON OWN ..... 02 TO GET A JOB .... 03 TO GET JOB TRAINING OR EXPERIENCE ..... 04 TO HAVE SOMETHING TO DO .... 05 THE PROGRAM ACTIVITIES SOUNDED INTERESTING .... 06 OTHER (SPECIFY) ____________ 08	TO MAKE MONEY ... 01 TO GET A BETTER JOB THAN COULD GET ON OWN ..... 02 TO GET A JOB .... 03 TO GET JOB TRAINING OR EXPERIENCE ..... 04 TO HAVE SOMETHING TO DO .... 05 THE PROGRAM ACTIVITIES SOUNDED INTERESTING .... 06 OTHER (SPECIFY) ____________ 08	TO MAKE MONEY ... 01 TO GET A BETTER JOB THAN COULD GET ON OWN ..... 02 TO GET A JOB .... 03 TO GET JOB TRAINING OR EXPERIENCE ..... 04 TO HAVE SOMETHING TO DO .... 05 THE PROGRAM ACTIVITIES SOUNDED INTERESTING .... 06 OTHER (SPECIFY) ____________ 08

	Yes	No	Yes	No
22. We would like to know more about the kinds of services the program provided you. (First/Next) did this program provide you with (READ CATEGORIES A-C AND CODE "YES" OR "NO" FOR EACH)				
A. Job counseling?	1	2	1	2
B. Classroom training to prepare for a GED?	1	2	1	2
C. On-the-job training?	1	2	1	2

23. Did this program provide you with other classroom training in reading, writing, or arithmetic?	Yes ..(ASK A)..... 1 No .(GO TO Q.24).. 2	Yes ..(ASK A)..... 1 No .(GO TO Q.24).. 2
A. IF YES: Was that classroom training part of a program of English as a second language--that is, a program for people who grew up speaking a language other than English?	Yes .... 1 No 2	Yes .... 1 No 2
24. Did this program provide you with classroom training in other skills needed for certain types of jobs?	Yes ..(ASK A)..1 No.(GO TO Q 25). 2	Yes...(ASK A)...1 No.(GO TO Q 25).2
A. IF YES: What kind of job were you being trained for? RECORD VERBATIM.	____________ ____________	____________ ____________
25. Did this program place you on a job outside the program?	Yes ..(ASK A)..... 1 No .(GO TO Q. 26). 2	Yes ..(ASK A)..... 1 No .(GO TO Q. 26). 2
A. IF YES: Was the job you were placed in a CETA or Public Service Employment (PSE) job?	Yes ...(ASK B).... 1 No .(GO TO Q.26).. 2	Yes ...(ASK B).... 1 No .(GO TO Q.26).. 2
B. IF YES TO A: In addition to being placed in a CETA or PSE job, were you also placed in a job outside that program?	Yes .... 1 No 2	Yes .... 1 No 2

Yes	No	Yes	No	Yes	No
1	2	1	2	1	2
1	2	1	2	1	2
1	2	1	2	1	2

Yes ..(ASK A)..... 1 No .(GO TO Q.24).. 2	Yes ..(ASK A)..... 1 No .(GO TO Q.24).. 2	Yes ..(ASK A)..... 1 No .(GO TO Q.24).. 2
Yes .... 1 No 2	Yes .... 1 No 2	Yes .... 1 No 2
Yes ..(ASK A).....1 No..(GO TO Q 25)..2	Yes .(ASK A).....1 No..(GO TO Q 25).2	Yes ..(ASK A)....1 No..(GO TO Q 25).2
______________ ______________	______________ ______________	______________ ______________
Yes ..(ASK A)..... 1 No .(GO TO Q. 26). 2	Yes ..(ASK A)..... 1 No .(GO TO Q. 26). 2	Yes ..(ASK A)..... 1 No .(GO TO Q. 26). 2
Yes ...(ASK B).... 1 No .(GO TO Q.26).. 2	Yes ...(ASK B).... 1 No .(GO TO Q.26).. 2	Yes ...(ASK B).... 1 No .(GO TO Q.26).. 2
Yes .... 1 No 2	Yes .... 1 No 2	Yes .... 1 No 2

26. Did this program provide you with (READ CATEGORIES AND CODE "YES" OR "NO" FOR EACH)	Yes	No	Yes	No
A. Extra help in preparing for college?	1	2	1	2
B. Health care or medical services?	1	2	1	2
C. Childcare?	1	2	1	2
D. Transportation?	1	2	1	2

27. Did this program provide you with any other kinds of services?	Yes ...(ASK A).... 1 No .(GO TO Q.28).. 2	Yes ...(ASK A).... 1 No .(GO TO Q.28).. 2
A. IF YES: What other kinds of services? RECORD VERBATIM.		
28. We would also like to know how you feel about this program.		
First, how difficult or easy (is/was) the work you (have/had) to perform in this program--very difficult, fairly difficult, not too difficult, fairly easy, or very easy?	Very difficult ... 1 Fairly difficult . 2 Not too difficult. 3 Fairly easy ...... 4 Very easy 5	Very difficult ... 1 Fairly difficult . 2 Not too difficult. 3 Fairly easy ...... 4 Very easy 5
29. And how about the discipline in the program--(is/was) it very tough, fairly tough, not too tough, fairly easy, or very easy?	Very tough .... 1 Fairly tough ..... 2 Not too tough .... 3 Fairly easy ...... 4 Very easy 5	Very tough .... 1 Fairly tough ..... 2 Not too tough .... 3 Fairly easy ...... 4 Very easy 5
30. How (does/did) the training or experience you received in this program affect your chances of getting a good job--do you feel that your chances of getting a good job (are/were) improved or not improved?	Improved .... 1 Not improved 2	Improved .... 1 Not improved 2
31. INTERVIEWER: SEE CALENDAR. HAS R HAD A JOB SINCE HE LEFT THIS PROGRAM?	YES .(ASK Q. 32).. 1 NO (SKIP TO Q.33). 2	YES .(ASK Q. 32).. 1 NO (SKIP TO Q.33). 2

Yes	No	Yes	No	Yes	No
1	2	1	2	1	2
1	2	1	2	1	2
1	2	1	2	1	2
1	2	1	2	1	2

Yes ...(ASK A).... 1	Yes ...(ASK A).... 1	Yes ...(ASK A).... 1
No .(GO TO Q.28).. 2	No .(GO TO Q.28).. 2	No .(GO TO Q.28).. 2
____________________	____________________	____________________
____________________	____________________	____________________
Very difficult ... 1	Very difficult ... 1	Very difficult ... 1
Fairly difficult . 2	Fairly difficult . 2	Fairly difficult . 2
Not too difficult. 3	Not too difficult. 3	Not too difficult. 3
Fairly easy 4	Fairly easy 4	Fairly easy 4
Very easy 5	Very easy 5	Very easy 5
Very tough 1	Very tough 1	Very tough 1
Fairly tough 2	Fairly tough 2	Fairly tough 2
Not too tough 3	Not too tough 3	Not too tough 3
Fairly easy 4	Fairly easy 4	Fairly easy 4
Very easy 5	Very easy 5	Very easy 5
Improved 1	Improved 1	Improved 1
Not improved 2	Not improved 2	Not improved 2
YES .(ASK Q. 32).. 1	YES .(ASK Q. 32).. 1	YES .(ASK Q. 32).. 1
NO (SKIP TO Q.33). 2	NO (SKIP TO Q.33). 2	NO (SKIP TO Q.33). 2

IF YES TO Q. 31, ASK Q. 32.
OTHERWISE, SKIP TO Q. 33.

32. After you left the program, did the training or experience you received in this program help you or not help you in you in performing any job?	Helped (ASK A).... 1 Did not help (ASK B).......... 2	Helped (ASK A).... 1 Did not help (ASK B).......... 2
A. IF YES: In what way has this training or experience helped you on a job? RECORD VERBATIM AND CODE ALL THAT APPLY.	______ ______ ______ LEARNED NEW JOB SKILLS ..... 01 LEARNED HOW TO WORK WITH OTHER PEOPLE .... 02 GAVE ME WORK EXPERIENCE ..... 03 OTHER (SPECIFY) ______ 04 NOW GO TO Q.33	______ ______ ______ LEARNED NEW JOB SKILLS ..... 01 LEARNED HOW TO WORK WITH OTHER PEOPLE .... 02 GAVE ME WORK EXPERIENCE ..... 03 OTHER (SPECIFY) ______ 04 NOW GO TO Q.33
B. IF NO: Why has the training or experience not been of help in any job? RECORD VERBATIM AND CODE ALL THAT APPLY.	______ ______ ______ THERE ARE NO JOBS OR I WAS NOT ABLE TO FIND ANY JOBS IN THAT LINE OF WORK .... 1 I DID NOT WANT TO DO THAT KIND OF WORK .... 2 I WAS NOT ABLE TO DO THAT KIND OF WORK .... 3 OTHER (SPECIFY) ______ 4	______ ______ ______ THERE ARE NO JOBS OR I WAS NOT ABLE TO FIND ANY JOBS IN THAT LINE OF WORK .... 1 I DID NOT WANT TO DO THAT KIND OF WORK .... 2 I WAS NOT ABLE TO DO THAT KIND OF WORK .... 3 OTHER (SPECIFY) ______ 4

Helped (ASK A).... 1	Helped (ASK A).... 1	Helped (ASK A).... 1
Did not help (ASK B).......... 2	Did not help (ASK B).......... 2	Did not help (ASK B).......... 2
____________________	____________________	____________________
____________________	____________________	____________________
____________________	____________________	____________________
LEARNED NEW JOB SKILLS 01	LEARNED NEW JOB SKILLS 01	LEARNED NEW JOB SKILLS 01
LEARNED HOW TO WORK WITH OTHER PEOPLE 02	LEARNED HOW TO WORK WITH OTHER PEOPLE 02	LEARNED HOW TO WORK WITH OTHER PEOPLE 02
GAVE ME WORK EXPERIENCE 03	GAVE ME WORK EXPERIENCE 03	GAVE ME WORK EXPERIENCE 03
OTHER (SPECIFY) ________________ 04	OTHER (SPECIFY) ________________ 04	OTHER (SPECIFY) ________________ 04
NOW GO TO Q.33	NOW GO TO Q.33	NOW GO TO Q.33
____________________	____________________	____________________
____________________	____________________	____________________
____________________	____________________	____________________
THERE ARE NO JOBS OR I WAS NOT ABLE TO FIND ANY JOBS IN THAT LINE OF WORK 1	THERE ARE NO JOBS OR I WAS NOT ABLE TO FIND ANY JOBS IN THAT LINE OF WORK 1	THERE ARE NO JOBS OR I WAS NOT ABLE TO FIND ANY JOBS IN THAT LINE OF WORK 1
I DID NOT WANT TO DO THAT KIND OF WORK 2	I DID NOT WANT TO DO THAT KIND OF WORK 2	I DID NOT WANT TO DO THAT KIND OF WORK 2
I WAS NOT ABLE TO DO THAT KIND OF WORK 3	I WAS NOT ABLE TO DO THAT KIND OF WORK 3	I WAS NOT ABLE TO DO THAT KIND OF WORK 3
OTHER (SPECIFY) ________________ 4	OTHER (SPECIFY) ________________ 4	OTHER (SPECIFY) ________________ 4

33. Everything considered, what one thing (do/did) you like most about this program? PROBE FOR CLARITY ONLY. RECORD VERBATIM.	____________________ ____________________ ____________________ THE JOB ITSELF .. 01 THE SUPERVISOR(S) 02 THE CO-WORKER(S). 03 THE PAY/MAKING MONEY .... 04 HAVING SOMETHING TO DO .... 05 THE CHANCE TO LEARN .... 06 EVERYTHING ...... 07 NOTHING .... 08 OTHER (SPECIFY) ________________ 09	____________________ ____________________ ____________________ THE JOB ITSELF .. 01 THE SUPERVISOR(S) 02 THE CO-WORKER(S). 03 THE PAY/MAKING MONEY .... 04 HAVING SOMETHING TO DO .... 05 THE CHANCE TO LEARN .... 06 EVERYTHING ...... 07 NOTHING .... 08 OTHER (SPECIFY) ________________ 09
34. What one thing (do/did) you dislike most about this program? PROBE FOR CLARITY ONLY. RECORD VERBATIM.	____________________ ____________________ ____________________ THE JOB ITSELF .. 01 THE SUPERVISOR(S) 02 THE CO-WORKER(S). 03 THE PAY .... 04 EVERYTHING ...... 05 NOTHING .... 06 OTHER (SPECIFY) ________________ 07	____________________ ____________________ ____________________ THE JOB ITSELF .. 01 THE SUPERVISOR(S) 02 THE CO-WORKER(S). 03 THE PAY .... 04 EVERYTHING ...... 05 NOTHING .... 06 OTHER (SPECIFY) ________________ 07
35. Thinking back over your entire experience in this program, how satisfied or dissatisfied are you with it overall--very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?	Very satisfied ... 1 Somewhat satisfied 2 Somewhat dissatisfied .... 3 Very dissatisfied. 4	Very satisfied ... 1 Somewhat satisfied 2 Somewhat dissatisfied .... 3 Very dissatisfied. 4
36. INTERVIEWER: ARE THERE ANY ADDITIONAL EMPLOYERS LISTED ON THE EMPLOYER FLAP NOT YET ASKED ABOUT?	YES (GO BACK TO PAGE 86 AND ASK THE APPROPRIATE QUESTIONS FOR THE NEXT JOB OR JOB PROGRAM)...1 NO (GO TO SECTION 11)...... 2	YES (GO BACK TO PAGE 86 AND ASK THE APPROPRIATE QUESTIONS FOR THE NEXT JOB OR JOB PROGRAM)...1 NO (GO TO SECTION 11)...... 2

______	______	______
______	______	______
______	______	______
THE JOB ITSELF .. 01	THE JOB ITSELF .. 01	THE JOB ITSELF .. 01
THE SUPERVISOR(S) 02	THE SUPERVISOR(S) 02	THE SUPERVISOR(S) 02
THE CO-WORKER(S). 03	THE CO-WORKER(S). 03	THE CO-WORKER(S). 03
THE PAY/MAKING MONEY 04	THE PAY/MAKING MONEY 04	THE PAY/MAKING MONEY 04
HAVING SOMETHING TO DO 05	HAVING SOMETHING TO DO 05	HAVING SOMETHING TO DO 05
THE CHANCE TO LEARN 06	THE CHANCE TO LEARN 06	THE CHANCE TO LEARN 06
EVERYTHING 07	EVERYTHING 07	EVERYTHING 07
NOTHING 08	NOTHING 08	NOTHING 08
OTHER (SPECIFY) ______ 09	OTHER (SPECIFY) ______ 09	OTHER (SPECIFY) ______ 09
______	______	______
______	______	______
______	______	______
THE JOB ITSELF .. 01	THE JOB ITSELF .. 01	THE JOB ITSELF .. 01
THE SUPERVISOR(S) 02	THE SUPERVISOR(S) 02	THE SUPERVISOR(S) 02
THE CO-WORKER(S). 03	THE CO-WORKER(S). 03	THE CO-WORKER(S). 03
THE PAY 04	THE PAY 04	THE PAY 04
EVERYTHING 05	EVERYTHING 05	EVERYTHING 05
NOTHING 06	NOTHING 06	NOTHING 06
OTHER (SPECIFY) ______ 07	OTHER (SPECIFY) ______ 07	OTHER (SPECIFY) ______ 07
Very satisfied ... 1	Very satisfied ... 1	Very satisfied ... 1
Somewhat satisfied 2	Somewhat satisfied 2	Somewhat satisfied 2
Somewhat dissatisfied 3	Somewhat dissatisfied 3	Somewhat dissatisfied 3
Very dissatisfied. 4	Very dissatisfied. 4	Very dissatisfied. 4
YES (GO BACK TO PAGE 86 AND ASK THE APPROPRIATE QUESTIONS FOR THE NEXT JOB OR JOB PROGRAM)...1	YES (GO BACK TO PAGE 86 AND ASK THE APPROPRIATE QUESTIONS FOR THE NEXT JOB OR JOB PROGRAM)...1	YES (GO BACK TO PAGE 86 AND ASK THE APPROPRIATE QUESTIONS FOR THE NEXT JOB OR JOB PROGRAM)...1
NO (GO TO SECTION 11)...... 2	NO (GO TO SECTION 11)...... 2	NO (GO TO SECTION 11)...... 2

SECTION 11 ON LAST JOB LASTING 2 WEEKS OR MORE

1. **INTERVIEWER:** IS R. CURRENTLY ON ACTIVE DUTY IN THE ACTIVE FORCES? (SEE ROW A, CALENDAR)"

YES .....(SKIP TO SECTION 12) 1
NO 2

2. A. **INTERVIEWER:** SEE EMPLOYER FLAP. IS THERE AN EMPLOYER LISTED IN COLUMN 1 FOR JOB R HAD LAST WEEK?

YES .....(SKIP TO SECTION 12) ... 1
NO 2

B. **INTERVIEWER:** SEE Q. 11, SECTION 10, SECOND COLUMN. IS THERE AN ENTRY IN COLUMN 2 FOR Q. 11 "KIND OF WORK R DID"?

YES .....(SKIP TO SECTION 12) 1
NO 2

3. When did you last work at a regular job or business lasting 2 consecutive weeks or more, either full- or part-time?

ENTER MONTH |__|__|

AND
YEAR 19 |__|__|
OR

NEVER WORKED AT ALL .(SKIP TO SECTION 13)..0001

4. **INTERVIEWER:** IS R. CURRENTLY ENROLLED IN REGULAR SCHOOL? (SEE CALENDAR, Q.1)

YES .....(SKIP TO SECTION 12) 1
NO 2

5. **INTERVIEWER**, CODE: YEAR ENTERED IN Q. 3 WAS:

1974-1979 1

1973 OR BEFORE 1973 ..(SKIP
TO SECTION 12) 2

6. For whom did you work?

____

7. What kind of business or industry was this?

____
____
____

8. What kind of work were you doing at this job? RECORD VERBATIM. IF MORE THAN ONE KIND OF WORK: PROBE: What kind of work did you do the longest for (EMPLOYER)?

9. What were your most important activities or duties? RECORD VERBATIM.

10. HAND CARD P. Were you..(READ CATEGORIES)

An employee of a private company, business, or individual for wages, salary, or commission	1
A government employee ....(ASK A)...	2
Self employed in own business, professional practice, or farm ....(ASK B)...	3
Working without pay in family business or farm	4

IF CODE 2 IN Q. 10, ASK A:

A. Were you an employee of the federal government, state government, or local government?

Federal government employee	1
State government employee	2
Local government employee	3
DON'T KNOW	8

NOW GO TO SECTION 12

IF CODE 3 IN Q. 10, ASK B:

B. Was your business incorporated or unincorporated?

Business incorporated	1
Business unincorporated	2
DON'T KNOW	8

SECTION 12 ON WORK EXPERIENCE PRIOR TO JAN. 1, 1978

1. INTERVIEWER: IS R

14-19 YEARS OLD, OR..(SKIP TO Q.5).......... 1

20-22 YEARS OLD?............................ 2

2. INTERVIEWER, SEE Q. 1, SECTION 1 AND ENTER THE YEAR OF R'S BIRTH BELOW. ADD "18" TO THIS YEAR. THEN GO TO Q. 3.

18

YEAR OF R'S BIRTH 19____

SUM 19____

3. INTERVIEWER: IN Q.4 BELOW, CROSS OUT THE COLUMNS FOR ANY YEARS PRIOR TO THE YEAR IN WHICH R TURNED 18 (SEE SUM IN Q.2).

FOR EACH YEAR NOT CROSSED OUT, ASK QS 4A & 4B BEFORE GOING ON TO THE NEXT, START WITH 1977 AND WORK BACKWARDS.

4. A. From January 1st of (YEAR) to December 31st of that year, about how many weeks in all were you working for pay, not counting work around the house or military service? ENTER IN A BELOW.

(IF NO WEEKS WORKED DURING THAT YEAR, ENTER "00" AND REASK A FOR THE NEXT YEAR. IF NO NEXT YEAR, GO TO Q.5)

FOR EACH YEAR IN WHICH THERE IS AN ENTRY OTHER THAN "00," ASK B BEFORE GOING ON TO THE NEXT YEAR. IF NO NEXT YEAR, GO TO Q.5.

B. Please think of the time that you worked during that year. During this time, about how many hours a week did you usually work? ENTER IN B BELOW. THEN GO BACK TO A FOR THE NEXT YEAR. IF NO NEXT YEAR, GO TO Q.5.

	1977	1976	1975
A. NUMBER OF WEEKS WORKED	WEEKS	WEEKS	WEEKS
B. NUMBER OF HOURS A WEEK	HRS/WK	HRS/WK	HRS/WK

5. INTERVIEWER, SEE CALENDAR. DURING ANY PART OF THE PERIOD BETWEEN JAN. 1, 1978 AND NOW, WAS R ENROLLED IN REGULAR SCHOOL? (Q.1 CODED 1, OR DATE IN Q.2 AFTER JAN. 1, 1978.)

YES .... (SKIP TO SECTION 13).... 1
NO 2

6. INTERVIEWER, SEE Q.2 ON CALENDAR FOR DATE R WAS LAST ENROLLED IN REGULAR SCHOOL.

7. Now I'd like to know about the first job at which you worked for at least two months after you stopped going to school in (DATE LAST ENROLLED IN REGULAR SCHOOL). For whom did you work at this job? ENTER BELOW.

____

OR
NEVER WORKED FOR AT LEAST TWO MONTHS (SKIP TO SECTION 13).....1

A. How many hours a week did you usually work for this job with (EMPLOYER)--less than 20 hours a week, or 20 hours a week or more?

less than 20 hours a week ..(ASK B)... 1

20 hours a week or more..(TRANSFER EMPLOYER NAME FROM ABOVE INTO LINE AT C BELOW) 2

B. IF LESS THAN 20 HOURS, ASK: Since you left regular school, what was the first job at which you worked for at least 2 months and at least 20 hours a week? ENTER EMPLOYER NAME AT C BELOW.

OR
NEVER WORKED AT SUCH A JOB (SKIP TO SECTION 13) 2

C. EMPLOYER ____

8. Now I'd like to ask a few questions about your job with (EMPLOYER IN Q.7C). When did you first start working for (EMPLOYER)?

ENTER MONTH AND YEAR 19 |__|__|

9. When did you last stop working for (EMPLOYER)?

ENTER MONTH AND YEAR 19 |__|__|

OR

CURRENTLY WORKING FOR EMPLOYER (SKIP TO SECTION 13) 00

10. INTERVIEWER, SEE DATES IN QS. 8 & 9. IS EITHER DATE AFTER JAN. 1. 1978?

YES ...(SKIP TO SECTION 13).................. 1

NO 2

11. What kind of business or industry was this? PROBE: What did they make or do? RECORD VERBATIM.

____

____

12. A. What kind of work did you usually do for (EMPLOYER)? IF MORE THAN ONE KIND OF WORK, PROBE: What kind of work did you do the longest for (EMPLOYER)? RECORD VERBATIM.

____

____

B. What were some of your main activities or duties? RECORD VERBATIM.

____

____

13. How many hours per week did you usually work at this job?

ENTER # OF HOURS: |__|__|

14. How many hours per day did you usually work?

ENTER # OF HOURS: |__|__|

15. Altogether, including tips, overtime, and bonuses, how much did you usually earn at that job? please give me the amount you earned before deductions like taxes and social security were taken out. ENTER IN APPROPRIATE BOXES. PROBE IF NECESSARY: Was that per hour, per day, per week, or what?

|__|__|,|__|__|__|.|__|__|

DOLLARS CENTS

PER HOUR	01
PER DAY	02
PER WEEK	03
BI-WEEKLY (EVERY TWO WEEKS)	04
PER MONTH	05
PER YEAR	06
OTHER (SPECIFY). ________________	07

16. Why did you happen to leave this job? RECORD VERBATIM AND CODE ONE ONLY.

____

____

INVOLUNTARY

LAYOFF, PLANT CLOSED, OR END OF TEMPORARY OR SEASONAL JOB	01
DISCHARGED OR FIRED	02
PROGRAM ENDED	03

VOLUNTARY

QUIT BECAUSE FOUND A BETTER JOB	04
QUIT BECAUSE OF EMPLOYMENT CONDITIONS (DIDN'T LIKE WORK, HOURS, WORKING CONDITIONS, OR LOCATION, DIDN'T GET ALONG WITH OTHER EMPLOYEES OR BOSS)	05
QUIT BECAUSE WAGES TOO LOW	06
QUIT DUE TO OWN ILLNESS, DISABILITY	07
QUIT BECAUSE INTERFERED WITH SCHOOL	08
QUIT TO ENTER ARMED FORCES	09
PREGNANCY	10
HUSBAND OR WIFE CHANGED JOBS AND/OR MOVED	11
MOTHER OR FATHER CHANGED JOBS AND/OR MOVED	12
FAMILY REASONS (TO GET MARRIED, TO CARE FOR CHILDREN, ILLNESS OF OTHER FAMILY MEMBERS)	13
OTHER (SPECIFY)	14

SECTION 13 ON GOVERNMENT TRAINING

1. INTERVIEWER: IS R PRESENTLY ENROLLED IN GRADES 1-12? (SEE Q. 1 ON CALENDAR)

YES ......(SKIP TO SECTION 14)..... 1

NO 2

2. (Besides the jobs you already told me about,) Since January 1, 1978, have you received skills training from a government-sponsored program such as CETA, the Job Corps, or any of these other government-sponsored programs where young people who are not attending regular school are provided with skills training? (HAND CARD Q)

Yes ....(ASK A-C)............ 1

No ....(GO TO Q. 3).......... 2

IF YES, ASK A-C:

A. What is the name of the school or agency where you've received this training? RECORD IN Q. 6 BELOW.

B. What is the name of the government program that sponsors this training? RECORD IN Q. 7 BELOW.

C. PROBE: Since January 1, 1978, have you participated in any other government-sponsored training programs? IF YES, GO BACK TO A FOR NEXT PROGRAM.

3. Before January 1, 1978. did you ever participate in any of these kinds of government-sponsored training programs? (HAND CARD Q)

Yes ....(ASK Q. 4)............... 1

No ....(SKIP TO Q. 5)............. 2

IF YES TO Q. 3, ASK Q. 4:

4. What were the names of the government-sponsored training programs in which you've participated before January 1, 1978? LIST BELOW.
PROBE: What others?

		FOR EACH LISTED, A-C A. What were you being trained for? RECORD VERBATIM.	A-C: B. Did you complete this program or not?		C. In what year did you (complete/leave) this program?
	NAMES OF PROGRAMS		Completed program	Did not complete program	
1.	________ ________	________ ________	1	2	19 |__|__|
2.	________ ________	________ ________	1	2	19 |__|__|
3.	________ ________	________ ________	1	2	19 |__|__|
4.	________ ________	________ ________	1	2	19 |__|__|
5.	________ ________	________ ________	1	2	19 |__|__|

5. INTERVIEWER: IF THERE ARE ANY PROGRAMS ENTERED IN QS 6-7, ASK QS 8-34 NOW. OTHERWISE, SKIP TO SECTION 14.

	COLUMN #1	COLUMN #2
6. ENTER NAME OF SCHOOL OR AGENCY WHERE R RECEIVED TRAINING:	______________________	______________________
7. ENTER NAME OF THE GOVERNMENT PROGRAM THAT SPONSORS THIS TRAINING:	______________________	______________________
8. You told me that you received skills training at (ENTRY IN 6) through the (ENTRY IN 7). When did you start participating in this program?	MONTH |__|__| DAY |__|__| YEAR 19 |__|__|	MONTH |__|__| DAY |__|__| YEAR 19 |__|__|
9. Are you currently participating in this program?	Yes ..(SKIP TO Q. 11)... 1 No ......(ASK Q. 10).... 2	Yes ..(SKIP TO Q. 11)... 1 No ......(ASK Q. 10).... 2
IF NO TO Q. 9, ASK Q. 10. 10. When did you stop participating in this program? PROBE FOR AND RECORD MONTH, DAY, AND YEAR.	MONTH |__|__| DAY |__|__| YEAR 19 |__|__|	MONTH |__|__| DAY |__|__| YEAR 19 |__|__|

11. For a variety of reasons, people often do not participate in their programs some of the time. Between (DATE IN Q. 8) and (now/DATE IN Q. 10), were there any periods of a **full week** or more during which **you** did **not** participate in this program?	Yes ....(ASK A)..... 1 No .....(GO TO Q. 12)... 2	Yes ....(ASK A)..... 1 No .....(GO TO Q. 12)... 2
A. **IF YES**: Between (DATE IN Q. 8) and (now/DATE IN Q. 10), for how many weeks, altogether, did you **not** participate in this program?	# WEEKS ☐☐	# WEEKS ☐☐
12. How many hours a week (do/did) you usually spend in the program? ENTER # OF HOURS	# HOURS ☐☐	# HOURS ☐☐
13. How many hours a day (do/did) you usually spend in the program? ENTER # OF HOURS	# HOURS ☐☐	# HOURS ☐☐
14. A. As far as you know, (is/was) this training part of a CETA program?	Yes .... 1 No 2	Yes .... 1 No 2
B. As far as you know, (is/was) this training (also) part of a WIN program?	Yes .... 1 No 2	Yes .... 1 No 2

		SEC 13
15. Why did you decide to enter this training program? RECORD VERBATIM. IF MORE THAN ONE REASON GIVEN, PROBE: What was the one main reason? CODE ONE ONLY.	TO GET MONEY .... 01 TO GET A BETTER JOB THAN COULD GET ON MY OWN ..... 02 TO GET A JOB .... 03 TO GET JOB TRAINING OR EXPERIENCE .... 04 TO HAVE SOMETHING TO DO ... 05 THE TRAINING SOUNDED INTERESTING .... 07 OTHER (SPECIFY) ______ 08	TO GET MONEY .... 01 TO GET A BETTER JOB THAN COULD GET ON MY OWN ..... 02 TO GET A JOB .... 03 TO GET JOB TRAINING OR EXPERIENCE .... 04 TO HAVE SOMETHING TO DO ... 05 THE TRAINING SOUNDED INTERESTING .... 07 OTHER (SPECIFY) ______ 08
16. INTERVIEWER, IS R CURRENTLY PARTICIPATING IN THIS PROGRAM? ("YES" TO Q. 9)	YES ....(SKIP TO Q. 18). 1 NO 2	YES ....(SKIP TO Q. 18). 1 NO 2

17. Did you complete this training program or not?	Completed this program .(GO TO Q. 18).	1	Completed this program .(GO TO Q. 18).	1
	Did not complete this program .(ASK A)..	2	Did not complete this program .(ASK A)..	2
A. IF CODE 2: Why did you leave this program? RECORD VERBATIM. IF MORE THAN ONE REASON GIVEN, PROBE: What was the main reason? CODE ONE ONLY.	______________________ ______________________ ______________________ ______________________		______________________ ______________________ ______________________ ______________________	
	EXPELLED FROM PROGRAM	01	EXPELLED FROM PROGRAM	01
	QUIT BECAUSE FOUND A JOB....	02	QUIT BECAUSE FOUND A JOB....	02
	WAS TRANSFERRED TO ANOTHER PROGRAM	03	WAS TRANSFERRED TO ANOTHER PROGRAM	03
	DISSATISFIED WITH PAY	04	DISSATISFIED WITH PAY	04
	UNSATISFACTORY CONDITIONS .	05	UNSATISFACTORY CONDITIONS .	05
	LOST INTEREST	06	LOST INTEREST	06
	TOO DIFFICULT	07	TOO DIFFICULT	07
	PROBLEMS WITH TRANSPORTATION	08	PROBLEMS WITH TRANSPORTATION	08
	TOO MUCH TIME INVOLVED	09	TOO MUCH TIME INVOLVED	09
	PREGNANCY	10	PREGNANCY	10
	OWN ILLNESS OR DISABILITY .	11	OWN ILLNESS OR DISABILITY .	11
	OTHER PERSONAL OR FAMILY REASONS	12	OTHER PERSONAL OR FAMILY REASONS	12
	MOVED	13	MOVED	13
	OTHER (SPECIFY) ______________________	14	OTHER (SPECIFY) ______________________	14
18. We would like to know more about the kinds of services the program provided you. (First/Next) did this program provide you with ... (READ CATEGORIES A & B AND CODE "YES" OR "NO" FOR EACH)	YES	NO	YES	NO
A. Job counseling?	1	2	1	2
B. Classroom training to prepare for a GED?	1	2	1	2

19. Did this program provide you with other classroom training in reading, writing, or arithmetic?	Yes ......(ASK A)....... 1 No ...(GO TO Q. 20)..... 2	Yes ......(ASK A)....... 1 No ...(GO TO Q. 20)..... 2
A. IF YES: Was that classroom training part of a program of English as a second language--that is, a program for people who grew up speaking a language other than English?	Yes .... 1 No 2	Yes .... 1 No 2
20. Did this program provide you with classroom training in other skills needed for certain types of jobs?	Yes ......(ASK A)........ 1 No ...(GO TO Q. 21)...... 2	Yes ......(ASK A)........ 1 No ...(GO TO Q. 21)...... 2
A. IF YES: What kind of job were you being trained for? RECORD VERBATIM.	____________________ ____________________ ____________________ ____________________	____________________ ____________________ ____________________ ____________________

21. Did this program place you on a job outside the program?	Yes ......(ASK A)....... 1 No ...(GO TO Q. 22)..... 2	Yes ......(ASK A)....... 1 No ...(GO TO Q. 22)..... 2
A. IF YES: Was the job you were placed in a CETA or Public Service Employment--PSE--job?	Yes ....(ASK B)....... 1 No ...(GO TO Q. 22)...... 2	Yes ....(ASK B)....... 1 No ...(GO TO Q. 22)...... 2
B. IF YES TO A: In addition to being placed in a CETA or PSE job, were you also placed in a job outside that program?	Yes .... 1 No 2	Yes .... 1 No 2
22. Did this program provide you with a job, (other) work experience or on-the-job training?	Yes ....(ASK A)....... 1 No 2	Yes ....(ASK A)....... 1 No 2
A. IF YES: What kind of job were you doing or being trained for? RECORD VERBATIM.	____________________ ____________________ ____________________ ____________________	____________________ ____________________ ____________________ ____________________

23. Did this program provide you with (REAL CATEGORIES AND CODE "YES" OR "NO" FOR EACH)

	YES	NO	YES	NO
A. Extra help in preparing for college?	1	2	1	2
B. Health care or medical services?	1	2	1	2
C. Childcare?	1	2	1	2
D. Transportation?	1	2	1	2

24. Did this program provide you with any other kinds of services?

	Yes ....(ASK A)...... 1	Yes ....(ASK A)...... 1
	No .....(GO TO Q. 25).... 2	No .....(GO TO Q. 25).... 2

A. IF YES: What other kinds of services? RECORD VERBATIM

25. Besides any money you may [presently receive/have receive(d)] through public assistance or Unemployment Compensation (do/while you were in the program, did) you receive any money for participating in this program?

Yes ....(ASK A)......	1	Yes ....(ASK A)......	1
No .....(GO TO Q. 26)....	2	No .....(GO TO Q. 26)....	2

A. IF YES: How much money (do/did) you usually receive for participating in this program? Please give me the amount you receive(d) before any deductions like taxes and social security (are/were) taken out.

PROBE IF NECESSARY: (Is/Was) that per hour, per day, per week, or what?

|__|__|,|__|__|__|.|__|__| DOLLARS CENTS		|__|__|,|__|__|__|.|__|__| DOLLARS CENTS	
Per hour	1	Per hour	1
Per day	2	Per day	2
Per week	3	Per week	3
Bi-Weekly (every 2 weeks)	4	Bi-Weekly (every 2 weeks)	4
Per month	5	Per month	5
Per year	6	Per year	6
OTHER (SPECIFY) ______________________	7	OTHER (SPECIFY) ______________________	7

26. We would also like to know how you feel about this program.

First, how difficult or easy (is/was) the work you (have/had) to perform in this program--very difficult, fairly difficult, not too difficult, fairly easy, or very easy?

Very difficult	1	Very difficult	1
Fairly difficult	2	Fairly difficult	2
Not too difficult	3	Not too difficult	3
Fairly easy	4	Fairly easy	4
Very easy	5	Very easy	5

27. And how about the discipline in the program--(is/was) it very tough, fairly tough, not too tough, fairly easy, or very easy?

Very tough	1	Very tough	1
Fairly tough	2	Fairly tough	2
Not too tough	3	Not too tough	3
Fairly easy	4	Fairly easy	4
Very easy	5	Very easy	5

28. How (does/did) the training

or experience you received in this program affect your chances of getting a good job--do you feel that your chances of getting a good job (are/were) improved or not improved?

Improved	1	Improved	1
Not improved	2	Not improved	2

29. INTERVIEWER: SEE CALENDAR. HAS R HAD A JOB SINCE HE LEFT THIS PROGRAM?	YES . . . (ASK Q. 30) . . . . 1 NO . . . (SKIP TO Q. 31) 2	YES . . . (ASK Q. 30) . . . . 1 NO . . . (SKIP TO Q. 31) 2
IF YES TO Q. 29, ASK Q. 30. OTHERWISE, SKIP TO Q. 31.		
30. After you left the program, did the training or experience you received in this program help you or not help you in performing any job?	Helped . . . (ASK A) . . . . 1 Did not help (ASK B) 2	Helped . . . (ASK A) . . . . 1 Did not help (ASK B) 2
A. IF YES: In what way has this training or experience helped you on a job? RECORD VERBATIM AND CODE ALL THAT APPLY.	________________________ ________________________ ________________________ LEARNED NEW JOB SKILLS ... 01 LEARNED HOW TO WORK WITH OTHER PEOPLE .... 02 GAVE ME EXPERIENCE USEFUL FOR LATER WORK/TRAINING.. 03 OTHER (SPECIFY) ____________________ 04 NOW GO TO Q. 31	________________________ ________________________ ________________________ LEARNED NEW JOB SKILLS ... 01 LEARNED HOW TO WORK WITH OTHER PEOPLE .... 02 GAVE ME EXPERIENCE USEFUL FOR LATER WORK/TRAINING.. 03 OTHER (SPECIFY) ____________________ 04 NOW GO TO Q. 31

B.	IF NO: Why has this training or experience not been of help in any job? RECORD VERBATIM AND CODE ALL THAT APPLY.	____________________ ____________________ ____________________	____________________ ____________________ ____________________
		THERE ARE NO JOBS OR I WAS NOT ABLE TO FIND ANY JOBS IN THAT LINE OF WORK 1	THERE ARE NO JOBS OR I WAS NOT ABLE TO FIND ANY JOBS IN THAT LINE OF WORK 1
		I DID NOT WANT TO DO THAT KIND OF WORK 2	I DID NOT WANT TO DO THAT KIND OF WORK 2
		I WAS NOT ABLE TO DO THAT KIND OF WORK 3	WAS NOT ABLE TO DO THAT KIND OF WORK 3
		OTHER (SPECIFY)______________ 4	OTHER (SPECIFY)______________ 4
31.	Everything considered, what one thing (do/did) you like most about this program: PROBE FOR CLARITY ONLY. RECORD VERBATIM AND CODE ONE ONLY.	____________________ ____________________ ____________________	____________________ ____________________ ____________________
		THE TRAINING ITSELF ...... 01 THE STAFF/SUPERVISORS .... 02 THE OTHER STUDENTS/ CO-WORKERS .... 03 THE PAY/MAKING MONEY ..... 04 HAVING SOMETHING TO DO ... 05 THE CHANCE TO LEARN ...... 06 EVERYTHING .... 07 NOTHING .... 08 OTHER (SPECIFY) ____________________ 09	THE TRAINING ITSELF ...... 01 THE STAFF/SUPERVISORS .... 02 THE OTHER STUDENTS/ CO-WORKERS .... 03 THE PAY/MAKING MONEY ..... 04 HAVING SOMETHING TO DO ... 05 THE CHANCE TO LEARN ...... 06 EVERYTHING .... 07 NOTHING .... 08 OTHER (SPECIFY) ____________________ 09

32. What one thing (do/did) you dislike most about this program? PROBE FOR CLARITY ONLY. RECORD VERBATIM AND CODE ONE ONLY.	____ ____ ____ THE TRAINING ITSELF ...... 01 THE STAFF/SUPERVISORS .... 02 THE OTHER STUDENTS/ CO-WORKERS .... 03 THE PAY .... 04 EVERYTHING ....05 NOTHING .... 06 OTHER (SPECIFY) ____ 07	____ ____ ____ THE TRAINING ITSELF ...... 01 THE STAFF/SUPERVISORS .... 02 THE OTHER STUDENTS/ CO-WORKERS .... 03 THE PAY .... 04 EVERYTHING .... 05 NOTHING .... 06 OTHER (SPECIFY) ____ 07
33. Thinking back over your entire experience in this program, how satisfied or dissatisfied are you with it overall--very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?	Very satisfied . . . . 1 Somewhat satisfied . . . . 2 Somewhat dissatisfied . . . . . . 3 Very dissatisfied 4	Very satisfied . . . . 1 Somewhat satisfied . . . . 2 Somewhat dissatisfied . . . . . . 3 Very dissatisfied 4
34. INTERVIEWER, ARE THERE ANY ADDITIONAL PROGRAMS RECORDED IN COLUMN HEADINGS NOT YET ASKED ABOUT?	YES . . (GO BACK TO PAGE 120 AND ASK THE APPROPRIATE QUESTIONS FOR NEXT PROGRAM. . . 1 NO . . . (GO TO SECTION 14). . . 2	781 YES . . (GO BACK TO PAGE 120 AND ASK THE APPROPRIATE QUESTIONS FOR NEXT PROGRAM. . . 1 NO . . . (GO TO SECTION 14). . . 2

SECTION 14 OTHER TRAINING

1. INTERVIEWER: IS R ...

14 OR 15 YEARS OLD (SKIP TO SECTION 15)............... 1

16-22 YEARS OLD 2

2. We've already talked about regular schooling, (the military,) jobs, and government-sponsored training programs. Now I would like to talk with you about other kinds of schooling and training.

IF, SINCE JAN. 1, 1978, R WAS ENROLLED IN REGULAR SCHOOL, READ: Besides your regular schooling...

IF R WAS EVER IN THE MILITARY, READ: (and) Besides your military experience...

IF R HAD ANY GOVERNMENT-SPONSORED JOB OR TRAINING SINCE JAN. 1, 1978, READ: (and) Besides any training you received in a government-sponsored training...

3A. Since January 1, 1978, have you received training from any other source, such as the kinds of places listed on this card? (HAND CARD R) For example, training in a business college, nurses program, an apprenticeship program, a vocational-technical institute, or any of these other kinds of sources?

Yes 1

No ....(SKIP TO Q. 5)........ 2

3B. Did you receive training from any of these sources for one month or more?

Yes 1

No ....(SKIP TO Q. 5)........ 2

4. Now I would like to ask you some questions about each kind of training in which you were enrolled for at least a month since Jan. 1, 1978. (PAUSE) Let's begin with the most recent program in which you were enrolled.

	1ST PROGRAM	2ND PROGRAM	3RD PROGRAM
a. What job were you being trained for?	______________	______________	______________
b. HAND CARD R. Which category on this card best describes where you received this training?			
1. Business college	 01	 01	 01
2. A nurses program	 02	 02	 02
3. An apprenticeship program	 03	 03	 03
4. A vocational or technical institute	 04	 04	 04
5. Barber or beauty school	 05	 05	 05
6. Flight school	 06	 06	 06
7. A correspondence course	 07	 07	 07
8. Company training program	 08	 08	 08
c. When did you start the training?	|__|__|__|__| MONTH YEAR	|__|__|__|__| MONTH YEAR	|__|__|__|__| MONTH YEAR
d. When did you finish or leave the training?	|__|__|__|__| MONTH YEAR OR STILL ENROLLED(GO TO F).....0001	|__|__|__|__| MONTH YEAR OR STILL ENROLLED(GO TO F).....0001	|__|__|__|__| MONTH YEAR OR STILL ENROLLED(GO TO F).....0001
e. Did you complete this training or not?			
Completed training	 1	 1	 1
Did not complete training	 2	 2	 2
f. How many hours per week (did/do) you usually spend . . . IF APPRENTICESHIP: in all your apprenticeship activities? IF CORRESPONDENCE COURSE: working on these materials? IF OTHER: in this training? ENTER HOURS/WEEK:	|__|__|	|__|__|	|__|__|
g. Since Jan.1,1978, have you received for at least one month any other kind of training from one of these sources?	Yes.(GO BACK TO a ABOVE)..1 No.(GO TO Q.5) 2	Yes.(GO BACK TO a ABOVE)..1 No.(GO TO Q.5) 2	Yes.(GO TO Q.5).........1 No.(GO TO Q.5) 2

Before 1978, did you receive (any other) training for at least one month from any of these kinds of sources?

Yes ....(ASK a-e)............. 1
No ....(SKIP TO Q. 6)........ 2

	1ST PROGRAM	2ND PROGRAM	3RD PROGRAM
a. What job were you being trained for?	______________	______________	______________
b. HAND CARD R. Which category on this card best describes where you received this training?			
1. Business college	 01	 01	 01
2. A nurses program	 02	 02	 02
3. An apprenticeship program	 03	 03	 03
4. A vocational or technical institute	 04	 04	 04
5. Barber or beauty school	 05	 05	 05
6. Flight school	 06	 06	 06
7. A correspondence course	 07	 07	 07
8. Company training program	 08	 08	 08
c. In what year did you finish or leave the training?	19|__|__|	19|__|__|	19 __|__|
d. Did you complete this training or not?			
Completed training	 1	 1	 1
Did not complete training	 2	 2	 2
e. Before 1978, did you receive for at least one month any other kind of training from any of these souces?	Yes.(GO BACK TO a ABOVE)..1 No.(GO TO Q.6).........2	Yes.(GO BACK TO a ABOVE)..1 No.(GO TO Q.6).........2	Yes.(GO TO Q.6).........1 No.(GO TO Q.6)..........2

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6. Besides regular school (and the training we've already talked about,), have you ever participated for at least one month in any other type of training designed to improve your chances of getting or keeping a job?

Yes ....(ASK A & B)............ 1

No ....(GO TO Q. 7)........... 2

IF YES, ASK A & B:

A. What other kinds of training have you participated in for at least one month? RECORD VERBATIM. PROBE: Any other?

B. When did you participate in this training--in what months and years?

	A.	FROM	TO
1.	______________________ ______________________	|--|--|--|--| MONTH YEAR	|--|--|--|--| MONTH YEAR
2.	______________________ ______________________	|--|--|--|--| MONTH YEAR	|--|--|--|--| MONTH YEAR
3.	______________________ ______________________	|--|--|--|--| MONTH YEAR	|--|--|--|--| MONTH YEAR
4.	______________________ ______________________	|--|--|--|--| MONTH YEAR	|--|--|--|--| MONTH YEAR

7. **INTERVIEWER:** SEE CALENDAR, ROWS A AND B. ARE THERE ANY ENTRIES ON ANY OF THESE ROWS FOR LAST SUMMER--THAT IS, FROM JUNE THROUGH AUGUST OF 1978?

YES ....(GO TO Q.8) 1

NO ....(ASK A & B)........... 2

IF NO, ASK A & B:

A. And now we have a different question. What did you do most of last summer?
RECORD VERBATIM AND CODE ALL THAT APPLY.

____

____

____

____

VACATION 01

NOTHING, GOOFED AROUND, ETC........... 02

ODD JOBS 03

REGULAR JOB ....(GO BACK TO SECTION 10 AND REASK QUESTION SEQUENCE TO CORRECT ANY ERRORS).... 04

TRAINING PROGRAM OR SPECIAL SCHOOL.... (GO BACK TO SECTION 13 OR SECTION 14 TO ENSURE YOU HAVE INFORMATION RECORDED ABOUT THIS PROGRAM/SCHOOLING)... 05

LOOKED FOR WORK 06

OTHER (SPECIFY)____________________ 07

B. Were you attending regular school at any time last summer?

Yes 1

No 2

8. Have you ever obtained any kind of degree or certificate, for example, an Associate's degree or any other type of college degree, or any type of certificate, license, or journeyman's card for practicing a profession or trade?

Yes ....(ASK A-F) 1

No ....(GO TO Q. 9) 2

IF YES, ASK A-E:

A. What is the name of the (first/second, etc.) one you received?	ASSOCIATES DEGREE. ..(GO TO E)....... 1 BACHELORS DEGREE.. ..(GO TO E)....... 2 MASTERS DEGREE.... ..(GO TO E)....... 3 OTHER (SPECIFY) ________________ 4	ASSOCIATES DEGREE. ..(GO TO E)....... 1 BACHELORS DEGREE.. ..(GO TO E)....... 2 MASTERS DEGREE.... ..(GO TO E)....... 3 OTHER (SPECIFY) ________________ 4	ASSOCIATES DEGREE. B..(GO TO E)...... 1 BACHELORS DEGREE.. B..(GO TO E)...... 2 MASTERS DEGREE.... B..(GO TO E)...... 3 OTHER (SPECIFY) ________________ 4	ASSOCIATES DEGREE. ..(GO TO E)....... 1 BACHELORS DEGREE.. ..(GO TO E)....... 2 MASTERS DEGREE.... ..(GO TO E)....... 3 OTHER (SPECIFY) ________________ 4
B. Is that a certificate, a license, or a journeyman's card?	certificate...1 license.......2 journeyman's card........3 OTHER(SPECIFY AND GO TO D) ____________4	certificate...1 license.......2 journeyman's card........3 OTHER(SPECIFY AND GO TO D) ____________4	certificate...1 license.......2 journeyman's card........3 OTHER(SPECIFY AND GO TO D) ____________4	certificate...1 license.......2 journeyman's card........3 OTHER(SPECIFY AND GO TO D) ____________4
C. Is it still valid?	Yes ....1 No.........2	Yes ....1 No.........2	Yes ....1 No.........2	Yes ....1 No.........2
D. For what profession or trade is that [certificate/license/journeyman's card/(other)]?	____________	____________	____________	____________
E. In what month and year did you receive it?	☐☐ ☐☐ MONTH YEAR	☐☐ ☐☐ MONTH YEAR	☐☐ ☐☐ MONTH YEAR	☐☐ ☐☐ MONTH YEAR
F. Have you ever obtained any other degrees, certificates, licenses, or journeyman's cards?	Yes..(GO TO A FOR NEXT CERTIFICATE).......1 No...(GO TO Q. 9).......2	Yes..(GO TO A FOR NEXT CERTIFICATE).......1 No...(GO TO Q. 9).......2	Yes..(GO TO A FOR NEXT CERTIFICATE).......1 No...(GO TO Q. 9).......2	Yes..(GO TO Q. 9).......1 No...(GO TO Q. 9).......2

9. Do you have a valid driver's license?

Yes 1
No 2

SECTION 15 ON PERIODS WHEN R WAS NOT AT WORK

1. A. INTERVIEWER, IS R

14-15 YEARS OLD...(SKIP TO SECTION 16) 1

16-22 YEARS OLD 2

B. INTERVIEWER, SEE ROWS A & B OF CALENDAR. ARE THERE ANY PERIODS OF AT LEAST ONE WEEK BETWEEN JAN.1, 1978 AND LAST WEEK DURING WHICH R. WAS NOT ON ACTIVE DUTY IN THE MILITARY OR WORKING? (IGNORE YELLOW LINES INDICATING PERIODS OF LAYOFF, ETC.)

YES...1

NO...(SKIP TO SECTION 16)....................2

IF ANY ENTRIES IN ROW A AND B READ Q. 2. OTHERWISE, GO TO INSTRUCTIONS FOR Q. 2A&B.

2. Now I am going to draw in some lines on our calendar to show clearly those periods between Jan. 1, 1978 and now when you were not (in the military) (or) (working)

2A&B DRAW IN ON ROW C LINES TO REPRESENT PERIODS DURING WHICH R WAS NOT IN THE MILITARY OR WORKING. USE DATES ENTERED IN ROWS A & B TO INDICATE IN ROW C DATES R ENDED AND BEGAN EACH PERIOD OF NON-INVOLVEMENT. USE WEEK # CALENDAR TO DETERMINE WEEK # OF EACH DATE. THEN TRANSFER THESE TO COLUMN HEADINGS HERE, STARTING WITH THE MOST RECENT. SUBTRACT THE WEEK # IN B FROM THE WEEK # IN A AND ENTER THE DIFFERENCE IN C.

IF MORE THAN 6 SUCH SETS OF DATES, ENTER THE 6 MOST RECENT AND ENTER THE TOTAL NUMBER IN BOX HERE: |__|__|

OFFICE USE: |__|__|

A. DATE ENDED PERIOD	|__|__| WEEK #	|__|__| WEEK #	|__|__| WEEK #	|__|__| WEEK #	|__|__| WEEK #	|__|__| WEEK #
	TO	TO	TO	TO	TO	TO
B. DATE BEGAN PERIOD	|__|__| WEEK #	|__|__| WEEK #	|__|__| WEEK #	|__|__| WEEK #	|__|__| WEEK #	|__|__| WEEK #
C. # OF WEEKS NOT WORKING (# IN A MINUS # IN B)	|__|__| # OF WEEKS	|__|__| # OF WEEKS	|__|__| # OF WEEKS	|__|__| # OF WEEKS	|__|__| # OF WEEKS	|__|__| # OF WEEKS

COMPLETE BOXES 2A-C FOR EACH PERIOD NOT WORKING BEFORE GOING ON TO Q. 3.

FOR EACH SPELL NOT WORKING, ASK QS 3 & 4 BEFORE GOING ON TO THE NEXT:

3. Our calendar (SHOW ROW C) shows that you were not working from (DATE) to (DATE). That would be about (NUMBER OF WEEKS FROM BOX 2C) weeks when you were not working.

A. During how many of these weeks were you looking for work or on layoff from a job? ENTER IN APPROPRIATE COLUMN.

NUMBER OF WEEKS LOOKING FOR WORK OR ON LAYOFF	WEEKS	WEEKS	WEEKS	WEEKS	WEEKS	WEEKS

OFFICE USE:

4. A. INTERVIEWER: SUBTRACT THE NUMBER OF WEEKS ON LAYOFF AND LOOKING FOR WORK (IN Q. 3A) FROM THE NUMBER OF WEEKS NOT WORKING (IN Q. 2C).

# IN 2C MINUS # IN 3A

IF ZERO, ENTER "00" AND GO BACK TO Q. 3A FOR NEXT PERIOD OF NOT WORKING OR GO TO SECTION 16.

FOR EACH NUMBER GREATER THAN ZERO, ASK B:

B. That leaves (NUMBER OF WEEKS IN Q. 4A) that you were not working or looking for work. What would you say was the main reason that you were not looking for work during that period? RECORD VERBATIM AND ENTER CODE IN BOX.

DID NOT WANT TO WORK.............01
ILL, DISABLED, UNABLE TO WORK....02
FOR SCHOOL EMPLOYEES: SCHOOL WAS NOT IN SESSION FOR THIS PERIOD..........................03
ARMED FORCES......................04
PREGNANCY 05
CHILD CARE PROBLEMS 06
PERSONAL, FAMILY REASONS 07
VACATION 08
LABOR DISPUTE/STRIKE 09
BELIEVED NO WORK AVAILABLE 10
COULD NOT FIND WORK 11
OTHER (SPECIFY) 12

IF CODE 12, SPECIFY BELOW:	IF CODE 12, SPECIFY BELOW:	IF CODE 12, SPECIFY BELOW:	IF CODE 12, SPECIFY BELOW:	IF CODE 12, SPECIFY BELOW:	IF CODE 12, SPECIFY BELOW:

SECTION 16 ON HEALTH

1) INTERVIEWER: DID R HAVE A JOB LAST WEEK? (SEE EMPLOYER FLAP, COL. 1)

Yes........(GO TO Q.2) 1

No.........(ASK A) 2

A. IF NO: Would your health keep you from working on a job for pay now?

Yes .....(GO TO Q.4)................. 1

No 2

2) A. (Are you/Would you be) limited in the kind of work you (could) do on a job for pay because of your health?

Yes 1

No 2

B. (Are you/Would you be) limited in the amount of work you (could) do because of your health?

Yes 1

No 2

3) INTERVIEWER, SEE Qs 2A & B. IS ANY "YES" ANSWER CODED IN THESE QUESTIONS?

YES 1

NO ...(SKIP TO SECTION 17)........... 2

4) Since what month and year have you had this limitation?

ENTER MONTH |__|__|

AND

YEAR 19 |__|__|

OR

IF VOLUNTEERED: All my life........... 0000

5) What health condition causes you to be limited in work? PROBE: Does any other condition cause you to be limited in work? RECORD VERBATIM.

CONDITION:

____

____

6) IF MORE THAN ONE CONDITION: Which of these health conditions would you say is the main cause of your limitation in work? RECORD VERBATIM.

____

____

ASK Qs 7-16 ABOUT THE ONE (MAIN) CONDITION R HAS.
(IF "ALL MY LIFE" IN Q. 4, CIRCLE CODE 0 WITHOUT ASKING.)

7) And since what month and year have you had this condition?

ENTER MONTH |__|__|

AND

YEAR 19 |__|__|

OR

IF VOLUNTEERED: All my life........... 0000

8) Did you ever see or talk to a doctor or other medical person about your (CONDITION)?

Yes ....(GO TO BOX A)	1
No ....(GO TO BOX A)	2

	EXAMINE "NAME OF CONDITION" AND BOX B AND CIRCLE APPROPRIATE CODE.	
B	Accident or injury .....(GO TO Q.14).......	01
O	In BOX B ....(GO TO Q.13).......	02
X	Neither ....(GO TO Q.9)........	03
	Normal Pregnancy ....(GO TO NEXT SECTION)	04
A	Normal Delivery ....(GO TO NEXT SECTION)	05
	Vasectomy/tubal ligation(GO TO NEXT SECTION)	06

BOX B

Acne
Appendicitis
Arteriosclerosis
Arthritis (any kind)
Athlete's foot
Bronchitis
Bunions
Bursitis
Calluses
Chickenpox
Cold
Corns
Croup
Diabetes (all types)
Epilepsy (any kind)
Gallstones
Goiter
Hardening of the arteries
Hay fever
Hemorrhoids or piles (all kinds)

Hernia (all types)
Kidney stones
Laryngitis
Migraine (any kind)
Mumps
Phlebitis (Thrombophlebitis)
Pneumonia
Sciatica
Sinus
Strep throat (Streptococcus)
Tonsillitis
Ulcer (duodenal, stomach peptic or gastric only)
Warts
Whooping cough

IF "NO" IN Q.8, TRANSCRIBE (MAIN) CONDITION TO Q.9. OTHERWISE, ASK Q.9.

9) What did the doctor or other medical person say it was -- did he give it a medical name? RECORD VERBATIM.

____

____

A. EXAMINE ANSWER TO Q.9 AND CIRCLE APPROPRIATE CODE:

CANCER . . (GO TO Q. 12). 1

OR

IN BOX B . (GO TO Q. 13). 2

OR

NEITHER . (ASK B) 3

B. IF NEITHER: What was the cause of (condition)? RECORD VERBATIM.

____

OR

IF VOL: Accident or injury . .(GO TO Q. 14). . . .01

IF ENTRY IN Q.9 OR 9B INCLUDES ANY OF THE FOLLOWING WORDS, ASK Q.10.

AILMENT
ANEMIA
ASTHMA
ATTACK
CONDITION
CYST
DEFECT
DISEASE
DISORDER
GROWTH
MEASLES
RUPTURE
TROUBLE
TUMOR
ULCER

10) What kind of (WORD) is it? RECORD VERBATIM.

____

IF ALLERGY OR STROKE, ASK Q.11.

11) How does the (allergy/stroke) affect you? RECORD VERBATIM.

____

IF IN Q'S. 9, 10, OR 11, THERE IS AN IMPAIRMENT, OR A PART OF THE BODY IS MENTIONED, OR ANY OF THE FOLLOWING ENTRIES, ASK Q.12.

ABSCESS
ACHE (EXCEPT HEAD OR EAR)
BLEEDING
BLOOD CLOT
BOIL
CANCER
CRAMPS (EXCEPT MENSTRUAL)
CYST
DAMAGE
GROWTH
HEMORRHAGE
INFECTION
INFLAMMATION
NEURALGIA
NEURITIS
PAIN
PALSY
PARALYSIS
RUPTURE
SORE
SORENESS
TUMOR
ULCER
VARICOSE VEINS
WEAK
WEAKNESS

12) What part of the body is affected? RECORD VERBATIM.
PROBE IF NECESSARY: What specific part of the body is affected?
PROBE: Was any other part of the body affected?

____

____

13) When did you first notice the (CONDITION)?

ENTER MONTH |__|__|

AND

YEAR 19 |__|__|

OR

IF VOLUNTEERED: Since birth 00

OR

IF VOL: DISCOVERED BY A DOCTOR OR OTHER
MEDICAL PROVIDER . . . (ASK A) . . .02

A. IF CODE 02: When was it discovered?

ENTER MONTH |__|__|

AND

YEAR 19 |__|__| (GO TO NEXT SECTION)

OR

IF VOLUNTEERED: At birth 00

IF "ACCIDENT OR INJURY," ASK Qs 14-16. OTHERWISE, GO TO SECTION 17.

14) When did the accident or injury happen?

ENTER MONTH |__|__|

AND

YEAR 19 |__|__|

OR

IF VOLUNTEERED: At birth 00

3) We would like to ask you what your (RELATIONSHIP) would think if you decided to do certain things. For example, we would like to know what (he/she) would think if you decided to become a carpenter. We realize that you may have already decided to become a carpenter, or that you may never decide to become a carpenter. Still, we would like to know how (RELATIONSHIP) would probably feel if you made that decision.

HAND CARD T. If (READ CATEGORY A) would (he/she) strongly approve, somewhat approve, somewhat disapprove, or strongly disapprove?

REPEAT FOR CATEGORIES B-G.

	Strongly Approve	Somewhat Approve	Somewhat Disapprove	Strongly Disapprove	DON'T KNOW
A. You decided to become a carpenter	4	3	2	1	8
B. You decided to join the armed forces	4	3	2	1	8
C. You decided to become an accountant	4	3	2	1	8
D. You decided to become an electrical engineer	4	3	2	1	8
E. You decided not to go to college	4	3	2	1	8
F. You decided to move far away from where your (parent or parents/ PARENT SUBSTITUTE(S)) live when you are 21?	4	3	2	1	8
G. You decided never to have children	4	3	2	1	8
H. ASK FEMALE R'S ONLY: You decided to pursue a full time career and delay starting a family	4	3	2	1	8

SECTION 18: RESIDENCES

1. INTERVIEWER: WAS R. ON ACTIVE DUTY IN THE ACTIVE FORCES AT ANY TIME SINCE JANUARY 1, 1978? (SEE ROW A, CALENDAR).

YES ..(SKIP TO SECTION 19).......... 1

NO 2

2. INTERVIEWER: WAS THE HOUSEHOLD INTERVIEW CONDUCTED ON A VERSION A, B, OR C? CODE ONE ONLY.

VERSION A . . . . (ASK A) . . . 1

VERSION B . . . . (ASK B) . . . 2

VERSION C . . . . (ASK C) . . . 3

A. IF CODE 1: Sometimes young people leave home for a while. Since Jan. 1, 1978, have you lived outside your (parent's/guardian's) household for a period of one month or more, not counting time spent away on vacations? [IF R WAS IN COLLEGE SINCE JAN. 1: Please do not forget to consider any time spent away from home while you (were/have been) in college.]

Yes ....(ASK Q. 3)............. 1

No ....(SKIP TO SECTION 19)..... 2

B. IF CODE 2: You are presently living away from your (parent's/guardian's) home. Since Jan. 1, 1978, has there been a period of one month or more during which you lived at home with your (parents/guardians)?

Yes ....(ASK Q. 3)............. 1

No ....(SKIP TO SECTION 19)..... 2

C. IF CODE 3: You are presently living in (your own place/NAME OF INSTITUTION). Since Jan. 1, 1978, has there been a period of one month or more during which you lived with a parent or guardian?

Yes ....(ASK Q. 3)............. 1

No ....(SKIP TO SECTION 19)..... 2

IF YES TO 2A, 2B, OR 2C, ASK Q. 3. OTHERWISE, SKIP TO SECTION 19.

3. Please tell me about all of the periods during which you did live in your (parents'/guardian's) household.

ENTER BELOW EACH PERIOD DURING WHICH R LIVED WITH (PARENTS/ GUARDIANS), STARTING WITH THE FIRST SUCH PERIOD SINCE JAN. 1, 1978. IF MORE THAN FOUR SUCH PERIODS, ENTER THE TOTAL NUMBER HERE |--| AND TRANSFER THE FIRST FOUR SETS OF DATES TO BELOW.|__|

FROM |__|__| MO |__|__| DAY 19|__|__| YEAR TO |__|__| MO |__|__| DAY 19|__|__| YEAR

FROM |__|__| MO |__|__| DAY 19|__|__| YEAR TO |__|__| MO |__|__| DAY 19|__|__| YEAR

FROM |__|__| MO |__|__| DAY 19|__|__| YEAR TO |__|__| MO |__|__| DAY 19|__|__| YEAR

FROM |__|__| MO |__|__| DAY 19|__|__| YEAR TO |__|__| MO |__|__| DAY 19|__|__| YEAR

SECTION 19: ROTTER SCALE

1) We would like to find out whether people's outlook on life has any effect on the kind of jobs they have, the way they look for work, how much they work, and matters of that kind. On each of these cards is a pair of statements numbered 1 and 2. HAND RESPONDENT CARD BOOKLET 2.

For each pair, please select one statement which is closer to your opinion. In addition, tell me whether the statement you select is much closer to your opinion or slightly closer.

In some cases you may find that you believe both statements; in other cases you may believe neither one. Even when you feel this way about a pair of statements, select the one statement which is more nearly true in your opinion.

Try to consider each pair of statements separately when making your choices; do not be influenced by your previous choices.

INTERVIEWER: CODE A CHOICE FOR PAIR ONE, THEN ASK B. DO THE SAME FOR REMAINING PAIRS.

PAIR ONE:

A (1). What happens to me is my own doing..............1

OR

(2). Sometimes I feel that I don't have enough control over the direction my life is taking......................2

B. ASK: Is this statement much closer or slightly closer to your opinion?

Much closer...................1

Slightly closer...............2

PAIR TWO:

A (1). When I make plans, I am almost certain that I can make them work.......................1

OR

(2). It is not always wise to plan too far ahead, because many things turn out to be a matter of good or bad fortune anyhow.......2

B. ASK: Is this statement much closer or slightly closer to your opinion?

Much closer...................1

Slightly closer...............2

PAIR THREE:

A (1). In my case, getting what I want has little or nothing to do with luck..1

OR

(2). Many times we might just as well decide what to do by flipping a coin..2

B. ASK: Is this statement much closer or or slightly closer to your opinion?

Much closer...................1

Slightly closer...............2

PAIR FOUR:

A (1). Many times I feel that I have little influence over the things that happen to me...............................1

OR

(2). It is impossible for me to believe that chance or luck plays an important role in my life.....................2

B. ASK: Is this statement much closer or slightly closer to your opinion?

Much closer...................1

Slightly closer...............2

?

SECTION 20 ON FAMILY ATTITUDES

1. We are interested in your opinion about the employment of wives. (HAND CARD U). I will read a series of statements and after each one I would like to know whether you strongly agree, agree, disagree, or strongly disagree. (first/next) READ STATEMENT, do you strongly agree, agree, disagree, or strongly disagree?

	Strongly Agree	Agree	Dis-agree	Strongly Disagree	UN-DECIDED
a. A woman's place is in the home, not in the office or shop.	4	3	2	1	8
b. A wife who carries out her full family responsibilities doesn't have time for outside employment.	4	3	2	1	8
c. A working wife feels more useful than one who doesn't hold a job.	4	3	2	1	8
d. The employment of wives leads to more juvenile delinquency.	4	3	2	1	8
e. Employment of both parents is necessary to keep up with the high cost of living.	4	3	2	1	8
f. It is much better for everyone concerned if the man is the achiever outside the home and the woman takes care of the home and family.	4	3	2	1	8
g. Men should share the work around the house with women, such as doing dishes, cleaning, and so forth.	4	3	2	1	8
h. Women are much happier if they stay at home and take care of their children.	4	3	2	1	8

?

SECTION 21 ON ASSETS AND INCOME

1. A. INTERVIEWER: IS R CURRENTLY ON ACTIVE DUTY IN THE MILITARY OR HAS R SERVED IN THE MILITARY SINCE JAN. 1, 1978? (SEE SECTION 7, QS 13 & 15)

YES ....(ASK B).......... 1

NO ....(GO TO C).......... 2

B. During 1978, how much total income did you receive from the military before taxes and other deductions? Please include money received from special pays, allowances, and bonuses.

$|__|__|__|,|__|__|__|.00

NOW SKIP TO Q.1D

C. INTERVIEWER: CODE YES OR NO FOR EACH ITEM:

	YES	NO
HAS R EVER HAD A CHILD? (SEE SECTION 3, Q.2)	1	2
IS R AGE 18 OR OLDER? (SEE SECTION 1, Q.1B)	1	2
IS R ENROLLED IN COLLEGE? (SEE SECTION 4, Q.24)	1	2
DOES R LIVE OUTSIDE PARENTAL HOME? (HH WITH A VERSION B OR C)	1	2
HAS R EVER BEEN MARRIED? (SEE SECTION 2, Q.1)	1	2

INTERVIEWER: IF ALL ANSWERS ARE "NO," SKIP TO Q.24.
IF ANY ANSWER IS "YES," ANSWER Q. 1D.

D. INTERVIEWER: IS R "PRESENTLY MARRIED" AND IS R'S SPOUSE LISTED ON THE HOUSEHOLD ENUMERATION?

YES ...(ASK BOTH A & B FOR Q. 2; THEN ASK A & B FOR Q. 3; THEN ASK A & B FOR Q. 4)........................ 1

NO ...(ASK A ONLY FOR QS 2-4). 2

2. Now I would like to ask you some questions about your income in 1978 (IF R IS CURRENTLY ON ACTIVE DUTY IN THE MILITARY OR HAS SERVED IN THE MILITARY SINCE JAN. 1, 1978, READ: Not counting any money you received from your military service . . .)

A. During 1978, how much did you receive from wages, salary, commissions, or tips from all jobs, before deductions for taxes or anything else?

|--|--|--| |--|--|--|
$|__|__|__| , |__|__|__|.00

OR

NONE...............000000

B. During 1978, how much did your (husband/wife) receive from wages, salary, commissions, or tips, from all jobs, before deductions for taxes or anything else?

|--|--|--| |--|--|--|
$|__|__|__| , |__|__|__|.00

OR

NONE...............000000

DON'T KNOW.........999998

3. A. During 1978, did you receive any money in income

1) from your own farm?

Yes 1
No 2

2) from your own nonfarm business, partnership or professional practice?

Yes 1
No 2

IF BOTH (1) and (2) ARE CODED "NO," GO TO Q.3B OR TO Q. 4.

1. IF YES: How much did you receive after expenses?

|--|--|--| |--|--|--|
$ |__|__|__| , |__|__|__|.00

OR
NONE..........000000

DON'T KNOW....999998

B. (In addition to the income you received from such sources), during 1978 did your (husband/wife) receive any money in income

1) from (his/her) own farm?

Yes 1
No 2
DON'T KNOW 8

2) from (his /her) own nonfarm business, partnership or professional practice?

Yes 1
No 2
DON'T KNOW 8

IF BOTH (1) AND (2) ARE CODED "NO" OR "D.K.," GO TO Q.4.

1. IF YES: How much did (he/she) receive after expenses?

|--|--|--| |--|--|--|
$ |__|__|__| , |__|__|__|.00

OR
NONE..........000000

DON'T KNOW....999998

4. A. During 1978, did you receive any unemployment compensation?

Yes ..(ASK 1-3).......1

No....(GO TO B OR
TO Q.5).......2

IF YES, ASK 1-3:
SHOW R CALENDAR

1. In which months of 1978 did you receive unemployment compensation? CODE ALL THAT APPLY.

JANUARY 01
FEBRUARY 02
MARCH 03
APRIL 04
MAY 05
JUNE 06
JULY 07
AUGUST 08
SEPTEMBER 09
OCTOBER 10
NOVEMBER 11
DECEMBER 12

2. During how many weeks in 1978 did you receive unemployment compensation?

WEEKS |__|__|

3. How much did you receive per week on the average?

$ |__| , |__|__|__|.00

B. During 1978, did (your husband/wife/partner) receive any unemployment compensation?

Yes...(ASK 1-3).........1

No....(GO TO Q. 5)......2

DON'T KNOW.(GO TO Q.5)..8

IF YES, ASK 1-3:
SHOW R CALENDAR

1. In which months of 1978 did your (husband/wife) receive unemployment compensation? CODE ALL THAT APPLY.

JANUARY 01
FEBRUARY 02
MARCH 03
APRIL 04
MAY 05
JUNE 06
JULY 07
AUGUST 08
SEPTEMBER 09
OCTOBER 10
NOVEMBER 11
DECEMBER 12
OR
DON'T KNOW..98

2. During how many weeks in 1978 did your (HUSBAND/WIFE) receive unemployment compensation?

WEEKS |__|__|

OR

DON'T KNOW....98

3. How much did (he/she) receive per week on the average?

$ |__| , |__|__|__|.00

OR

DON'T KNOW..9998

5. INTERVIEWER: HAS RESPONDENT EVER HAD A CHILD?
(SEE SECTION 3, Q.2)

YES ....(ASK A)...............	1
NO ....(GO TO Q. 6)............	2

A. IF YES: During 1978, did you receive any money from someone living outside this household for alimony or child support?

Yes ....(ASK B)...............	1
No ....(GO TO Q. 6)............	2

B. IF YES TO A: How much did you receive in 1978 for alimony or child support?

$|__|__| , |__|__|__|.00

OR

DON'T KNOW 99998

6. INTERVIEWER: IF ANYONE OTHER THAN R'S SPOUSE AND CHILDREN IS LISTED IN HOUSEHOLD ENUMERATION, READ BELOW. OTHERWISE, GO TO A.

For these next few questions, we are interested in different kinds of payments that might have been made directly to you [or your (husband/wife)]. For these questions, please do not include any payments that were made to your parents or to other members of your family, even if the payments were used to help pay for your support.

A. During 1978, did you [or your (husband/wife)] receive any payments from Aid to Families with Dependent Children--AFDC?

Yes....(ASK B & C)..........	1
No.....(GO TO Q. 7).........	2

IF YES, ASK B & C:

B. In which months of 1978 did you [or your (husband/wife)] receive AFDC payments? CODE ALL THAT APPLY.

JANUARY....................	01
FEBRUARY...................	02
MARCH......................	03
APRIL......................	04
MAY........................	05
JUNE.......................	06
JULY.......................	07
AUGUST.....................	08
SEPTEMBER..................	09
OCTOBER....................	10
NOVEMBER...................	11
DECEMBER...................	12

C. During 1978, how much did you [or your (husband/wife)] receive per month on the average from AFDC?

$|__| , |__|__|__|.00

OR

DON'T KNOW............9998

7. During 1978, did you [or your (husband/wife)] buy or receive any food stamps under the government's Food Stamp Plan?

Yes....(ASK A-C)............1

No.....(GO TO Q. 8).........2

IF YES, ASK A-C:

A. In which months of 1978 did you [or your (husband/wife)] buy or receive food stamps? CODE ALL THAT APPLY.

JANUARY.................... 01
FEBRUARY................... 02
MARCH...................... 03
APRIL...................... 04
MAY........................ 05
JUNE....................... 06
JULY....................... 07
AUGUST..................... 08
SEPTEMBER.................. 09
OCTOBER.................... 10
NOVEMBER................... 11
DECEMBER................... 12

B. How much did you [or your (husband/wife)] pay for the food stamps you bought or received during (MOST RECENT MONTH CODED IN A)?

$ |__|__|__|.00
OR
RECEIVED FREE..............000
OR
DON'T KNOW.................998

C. How many dollars worth of food would these food stamps buy?

$ |__|__|__|.00
OR
DON'T KNOW.................998

8. (Besides the AFDC [and] food stamps), During 1978 did you [or your (husband/wife)] receive any Supplemental Security Income or any other public assistance or welfare payments from the local, state, or federal government?

Yes....(ASK A-C)............1

No...(GO TO Q. 9)..... 2

IF YES, ASK A-C:

A. From what sources did you receive these payments? CODE ALL THAT APPLY.

Supplemental Security Income 1

OTHER (SPECIFY) ________________________2

B. In which months of 1978 did you [or your (husband/wife)] receive these payments? CODE ALL THAT APPLY.

JANUARY.................... 01
FEBRUARY................... 02
MARCH...................... 03
APRIL...................... 04
MAY........................ 05
JUNE....................... 06
JULY....................... 07
AUGUST..................... 08
SEPTEMBER.................. 09
OCTOBER.................... 10
NOVEMBER................... 11
DECEMBER................... 12

C. And how much did you [or your (husband/wife)] receive per month, on the average, during 1978?

$|__|__|__|.00
OR
DON'T KNOW............... 998

9. A. During 1978, did you [or your (husband/wife)] receive any educational benefits for veterans under the G.I. Bill or V.E.A.P?

Yes 1

No 2

B. During 1978, did you [or your (husband/wife)] receive any (other kinds of) scholarships, fellowship, or grants?

Yes 1

No 2

C. INTERVIEWER: IS Q. 9A AND/OR Q. 9B ANSWERED "YES"?

YES 1

NO ....(SKIP TO Q. 11).......... 2

IF NOT "PRESENTLY MARRIED," CIRCLE CODE "1" IN Q. 10 WITHOUT ASKING:

10. Who received these benefits--you, your (husband/wife), or both of you?

Respondent only..........(ASK A ONLY)...... 1

HUSBAND/WIFE ONLY........(ASK B ONLY)...... 2

Respondent & husband/wife..(ASK A & B)..... 3

A. RESPONDENT: What was was the total dollar value of the assistance you received from these sources during 1978?

$ |__|__| , |__|__|__|.00

OR

DON'T KNOW....99998

B. SPOUSE: What was the total dollar value of the assistance your (husband/wife) received from these sources during 1978?

$ |__|__| , |__|__|__|.00

OR

DON'T KNOW....99998

11. **INTERVIEWER:** DID R RECEIVE MONEY FOR ALIMONY OR CHILD SUPPORT? (SEE Q.5A)

YES . . (READ A) . . . 1

NO . . (GO TO Q. 12) . 2

A. **IF YES, READ:** Besides the alimony or child support you have already told me about (CONTINUE Q. 12)

12. [(and) besides the scholarship, fellowship, or grant you have already told me about,]
During 1978 . . .

IF R LIVES IN DU: did you [or your (husband/wife)] regularly receive any money from persons living outside this household?

IF R LIVES IN A DORM, , FRATERNITY, OR SORORITY: did you [or your (husband/wife)] regularly receive any money from persons living outside your home in (CITY OF PERMANENT RESIDENCE)?

IF R LIVES IN A MILITARY BARRACK: did you regularly receive any money from any person?

Yes ....(ASK A)............... 1

No ....(GO TO Q. 13)........... 2

A. **IF YES:** How much did you receive from this source during 1978?

$|__|__| , |__|__|__|.00

OR

DON'T KNOW 99998

HAND CARD V.

13. Aside from the things you have already told me about, during 1978, did you [or your (husband/wife)] receive any money from any other sources such as the ones on this card? For example: things like interest on savings , payments from Social Security, net rental income, or any other regular or periodic sources of income?

(IF R IS IN THE MILITARY SINCE JAN. 1, 1978: Again, please do not include any income from your military service.)

Yes ....(ASK A).................. 1

No ....(GO TO Q. 14)............ 2

A. IF YES: Altogether, how much did you [or your (husband/wife)] receive from these sources during 1978?

$ |__|__| , |__|__|__|.00

OR

DON'T KNOW....99998

14. INTERVIEWER: DID YOU DO THE HOUSEHOLD ENUMERATION WITH A

VERSION A ....(SKIP TO Q. 18).......... 1

VERSION B ....(SKIP TO Q. 18).......... 2

VERSION C 3

15. INTERVIEWER: DOES RESPONDENT LIVE WITH ANY RELATIVES OTHER THAN RESPONDENT'S SPOUSE AND CHILDREN?

YES ....(GO TO Q. 16)............ 1

NO ....(ASK A).................. 2

A. INTERVIEWER: DOES RESPONDENT CURRENTLY LIVE WITH ONE OTHER ADULT, OF THE OPPOSITE SEX, WHO IS NOT RELATED TO THE RESPONDENT?

YES ....(SKIP TO Q. 17).......... 1

NO ....(SKIP TO Q. 18).......... 2

16. These next few questions are about the income received during 1978 by the other persons who live here who are related to you—that is, (READ NAMES OF ALL PERSONS IN HOUSEHOLD OTHER THAN RESPONDENT'S SPOUSE AND CHILDREN WHO ARE RELATED TO RESPONDENT). SEC 21

A. During 1978, did any of these persons receive (READ CATEGORIES) AND CODE "YES" OR "NO" FOR EACH:

	Yes	No	DON'T KNOW
1) income from a full or part-time job?	1	2	8
2) net income from their own farm?	1	2	8
3) net income from their own nonfarm business, partnership or professional practice?	1	2	8
4) payments from Aid to Families with Dependent Children? Please include any payments which these persons may have received to help pay for your (or your husband's/wife's support).	1	2	8
5) Supplemental Security Income, or any other public assistance or welfare from the local, state, or federal government?	1	2	8
6) unemployment compensation or workmen's compensation?	1	2	8
7) income from Social Security or pensions?	1	2	8
8) income from any other regular or periodic sources?	1	2	8

B. INTERVIEWER: IS ANY ITEM IN (A) CODED "YES" ('1')?

YES	........(ASK C)..................	1
NO	........(SKIP TO Q. 18)..........	2

IF YES TO B, ASK C:

C. Counting the income from all of these sources--that is, (READ ALL SOURCES CODED "YES" ABOVE IN A), what was the total income received by (READ NAMES OF ADULTS OTHER THAN SPOUSE AND CHILDREN WHO ARE RELATED TO RESPONDENT) during 1978 - before taxes and other deductions?

```
 |--|--|--|   |--|--|--|
$|__|__|__| , |__|__|__|.00
```

OR

DON'T KNOW......999998

NOW SKIP TO Q. 18

17. During 1978, did (READ NAME OF THE ONE PERSON OF THE OPPOSITE SEX ON HH ENUMERATION) receive (READ CATEGORIES) AND CODE "YES" OR "NO" FOR EACH: SEC 21

	Yes	No	DON'T KNOW
1) income from a full or part-time job?	1	2	8
2) net income from his/her own farm?	1	2	8
3) net income from his/her own nonfarm business, partnership or professional practice?	1	2	8
4) payments from Aid to Families with Dependent Children?	1	2	8
5) Supplemental Security Income, or any other public assistance or welfare from the local, state, or federal government?	1	2	8
6) unemployment compensation or workmen's compensation?	1	2	8
7) income from Social Security or pensions?	1	2	8
8) income from any other regular or periodic sources?	1	2	8

B. INTERVIEWER: IS ANY ITEM IN A CODED "YES" ('1')?

YES ....(ASK C)................. 1
NO ....(GO TO Q. 18)............ 2

IF YES TO B, ASK C:

C. Counting the income from all of these sources--that is, (READ ALL SOURCES CODED "YES" ABOVE IN A), what was the total income received by (READ NAME) during 1978--before taxes and other deductions?

$ |__|__|__| , |__|__|__| .00

OR

DON'T KNOW......999998

18. During 1978, did anyone [other than your (husband/wife)] pay at least half of your living expenses?

Yes 1
No ......(GO TO Q. 19)........ 2

A. IF R LIVES IN A MILITARY BARRACK, GO TO C.

B. Does this person live (here in this household/in your home at [CITY OF PERMANENT RESIDENCE])?

Yes ......(GO TO Q. 19)........ 1
No.............................. 2

C. What is that person's relationship to you?

RELATIONSHIP TO RESPONDENT: ______________________

D. During 1978, what was the total income of (SOURCE OF SUPPORT) and all family members living with (him/her) before taxes or other deductions?

$ |__|__|__| , |__|__|__|.00

OR
DON'T KNOW 999998

19. Do you pay at least half of the living expenses of any person other than yourself (and your husband/wife)?

Yes ...... (ASK A) 1
No ...... (SKIP TO Q. 21).... 2

A. IF YES: How many persons are dependent upon you for at least one-half of their support?

NUMBER OF DEPENDENTS |____|____|

20. INTERVIEWER: DID YOU DO A HOUSEHOLD ENUMERATION WITH A

VERSION B 1

VERSION A OR C ....(GO TO C)........... 2

A. INTERVIEWER: IF R IS LIVING IN A MILITARY BARRACK, CODE HERE. OTHERWISE, GO TO B.

R IS "PRESENTLY MARRIED" ..(GO TO B)... 1

R IS NOT "PRESENTLY MARRIED" .(GO TO D) 2

B. IF VERSION B: Do any of these dependents live somewhere other than at your home in (CITY OF PERMANENT RESIDENCE)?

Yes ....(ASK D)............. 1
No ....(GO TO Q. 21).......... 2

C. IF VERSION A OR C: Do any of these dependents live somewhere other than here at home with you?

Yes ....(ASK D)............. 1
No ....(GO TO Q. 21).......... 2

IF YES TO B OR C, ASK D:

D. These dependents (who live away from your home)--what is their relationship to you? ENTER SPECIFIC RELATIONSHIP (e.g., SON, NEPHEW, DAUGHTER-IN-LAW) OR "NOT RELATED."

RELATIONSHIP

HAND CARD W.

21. Do you [or your (husband/wife)] have any money set aside for savings--such as money you keep in a safe place at home, or in a savings or checking account, or U.S Savings Bonds, or any other money set aside for savings?

Yes.........................1
No..........................2

22. Do you (or your husband/wife) personally own, or are you making payments on any cars, vans or trucks?

Yes..........................1
No...........................2

IF R LIVES IN DORM OR BARRACKS, SKIP TO SECTION 22.
OTHERWISE, ASK Q. 23.

23. Is this (house/apartment) owned or being bought in your name [or in your (husband's/wife's) name]?

Yes ...(SKIP TO SECTION 22).... 1
No ....(SKIP TO Q.27)..... 2

IF "NO" TO ALL ITEMS IN Q. 1C, ASK Q. 24:

24. Now I would like to ask you a few questions about your income in 1978.

During 1978, how much did you receive from wages, salary, commisions,or tips from all jobs, before deductions for taxes or anything else?

$ |__|__|__| , |__|__|__|.00

OR

NONE...............000000

25. During 1978, did you receive:

	Yes	No
A. Income from working on your own or in your own business or farm?	1	2
B. Unemployment compensation?	1	2
C. Workers' compensation or any other disability payments?	1	2
D. Interest on savings or any other income you received regularly or periodically? Do not count allowances from your parents.	1	2

26. INTERVIEWER: IS ANY ITEM CODED "YES" IN Q. 25?

YES ....(ASK A)............. 1
NO ......(GO TO Q. 27).......... 2

A. IF YES: Counting the income from all of these sources--that is, (READ ALL SOURCES CODED "YES" ABOVE IN Q. 25), what was the total income you received during 1978?

$ |__|__|__| , |__|__|__|.00

OR

DON'T KNOW......999998

27. A. During any part of 1978, did you (IF R LIVES WITH RELATIVES: and your family) live in public housing?

Yes 1
No 2

B. During any part of 1978, did you (IF R LIVES WITH RELATIVES: and your family) receive a rent subsidy or a lower rent because the federal, state, or local government was paying a part of the cost?

Yes................................ 1
No 2

SECTION 22 ON ASPIRATIONS AND EXPECTATIONS

1. Now I would like to talk with you about your future plans. What would you like to be doing when you are 35 years old? RECORD VERBATIM AND CODE ONE ONLY.

IF R SAYS "WORKING," PROBE: What kind of work would you like to be doing when you are 35 years old?

IF R GIVES MORE THAN ONE OCCUPATION, PROBE: Which of these occupations would you prefer?

____

____

____

CODE SMALLEST NUMBER MENTIONED

IF VOLUNTEERED: SAME AS PRESENT JOB ...(SKIP TO Q. 4). 1
OR
OCCUPATION: ________________ ....(GO TO Q. 3)... 2
OR
MARRIED, OR KEEPING HOUSE, OR RAISING A FAMILY ..(ASK Q. 2). 3
OR
OTHER (SPECIFY AND ASK A)
______________________ 4
OR
DON'T KNOW ......(SKIP TO Q. 4). 8

A. IF OTHER: If you were to work, what kind of work would you prefer?

CODE SMALLEST NUMBER MENTIONED

IF VOLUNTEERED: SAME AS PRESENT JOB ...(SKIP TO Q. 4). 1
OR
OCCUPATION: ________________ ....(GO TO Q. 3)... 2
OR
DO NOT PLAN TO WORK ..(SKIP TO Q. 4)...................... 4
OR
DON'T KNOW .....(SKIP TO Q. 4).. 8

IF CODE 3 IN Q.1, ASK Q.2:

2. Would you like to be working in addition to (being married/keeping house/raising a family)?

Yes ....(ASK A)............... 1

No ....(ASK B).............. 2

A. IF YES: What occupation would you like to be working in when you are 35 years old? RECORD VERBATIM.

____

____

____

NOW GO TO Q.3

B. IF NO: Sometimes (women/people) decide to work in a job after they have been married for a while. If you were to work, what kind of work would you prefer? CODE ONE ONLY.

IF VOLUNTEERED: SAME AS PRESENT JOB ...(SKIP TO Q. 4).	1
OR	
OCCUPATION: ____________________	2
OR	
DON'T PLAN TO WORK ..(SKIP TO Q. 4)......................	4
OR	
DON'T KNOW ......(SKIP TO Q. 4).	8

3. What do you think your chances are of getting into this type of work? Do you think they are excellent, good, fair or poor?

Excellent..................	1
Good.......................	2
Fair.......................	3
Poor.......................	4

4. Suppose at age 35 that you and your (husband/wife) [IF NOT PRESENTLY MARRIED: if you are married,] could not earn enough money by working to support your family; please tell me whether you probably would or probably would not do each of the following things. (First/Next) (READ CATEGORY)--would you probably do that or probably not do that?

	Probably would do that	Probably would not do that	DON'T KNOW
a. Get more education if you were paid enough to live on while learning	1	2	8
b. Go on welfare	1	2	8
c. Enter a job-training program if you were paid enough to live on while in training.	1	2	8
d. Apply for food stamps	1	2	8
e. Shoplift	1	2	8

5. If, by some chance, you [and your (husband/wife)] were to get enough money to live comfortably without working, do you think you would work anyway?

Yes........................1

No.........................2

6. INTERVIEWER: HAS RESPONDENT EVER BEEN MARRIED? (CODES 1-4 IN Q. 1, SECTION 2.)

YES .....(SKIP TO Q. 9).....1
NO 2

7. Do you expect to be married 5 years from now?

Yes..........................1
No...........................2
DON'T KNOW...................8

8. At what age would you like to marry? [PROBE IF NECESSARY: when you are (less than 20,) age 20 through 24, age 25 through 29, age 30 or older, or never?]

Less than 20..................1
Age 20 to 24..................2
Age 25 to 29..................3
Age 30 or older...............4
Never.........................5

9. Do you expect to be in school 5 years from now?

Yes...........................1
No............................2
DON'T KNOW....................8

10. Do you expect to be working in a job 5 years from now?

Yes..(ASK A)..................1
No...(ASK B)..................2
DON'T KNOW...(ASK B)..........8

A. IF YES: What kind of work do you think you would be doing? CODE ONE ONLY. IF MORE THAN ONE OCCUPATION, PROBE: What one kind of work do you think you would prefer?

IF VOLUNTEERED: SAME AS PRESENT JOB....990
OR
OCCUPATION: ____________________________
OR
DON'T KNOW 998

B. IF NO: If you were to work, what kind of work would you prefer?

OCCUPATION: ____________________________

RECORD TIME ENDED ____________ AM PM

IF THERE WERE ANY INTERRUPTIONS OF 5 MINUTES OR MORE ENTER LENGTH OF INTERRUPTION HERE: |__|__|__| MINUTES

NOW GO TO LOCATING INFORMATION SUPPLEMENT.

INTERVIEWER REMARKS

INTERVIEWER: Complete these remarks as soon as you have finished the questionnaire.

1. Length of the interview

Minutes

2. Date of Interview

				7	9
Mo		Day			

---

3. Race of Respondent

White	1
Black	2
Other	3

---

4. In general, what was the respondent's attitude toward the interview?

Friendly and interested	1
Cooperative but not particularly interested	2
Impatient and restless	3
Hostile	4

---

5. In general, was the respondent's understanding of the questions

Good?	1
Fair?	2
Poor?	3

6. Was anyone else present during any portion of the youth's interview?

Yes . . (ANSWER A) 1
No . . (GO TO Q. 7) 2

A. IF YES: Who was present? CODE ALL THAT APPLY.

R's parent(s) 1
Other member(s) of R's household 2
R's friend(s) 3
Other . (SPECIFY)__________ ______________________ 4

7. Please record your interviewer I.D. ☐☐☐☐☐

8. Please sign your name here:______________________________________

The Center has also been active in manpower planning both in the U.S. and in the developing countries. A project for the Ohio Advisory Council for Vocational Education identified the highly fragmented institutions and agencies which supply vocational and technical training in Ohio. Subsequent projects for the Ohio Occupational Information Coordinating Committee have followed graduates of these programs. These data and information on occupational distributions of employers collected for the Occupational Employment Statistics Program are being integrated into a comprehensive planning model which will be accessible to trainees and employers and linked to a national network.

Another focus of the Center's research is industrial relations and collective bargaining. In a project for the U.S. Department of Labor, staff members are working with unions and management in a variety of industries to evaluate several current experiments for expedited grievance procedures. The procedural adequacies, safeguards for due process, and cost and timing of the new procedure are being weighed against traditional arbitration techniques.

Senior staff also serve as consultants to many boards and commissions at the national and state level. Recently the Center's staff have produced papers and prepared testimony for the Department of Labor, the Vice President's Task Force on Youth Unemployment, the Joint Economic Committee of Congress, the National Commission for Employment and Unemployment Statistics, the National Commission for Employment Policy, the White House Conference on the Family, the Ohio Department of Corrections, the Ohio Board of Regents, the Ohio Governor's Task Force on Health, and the Ohio Governor's Task Force on Welfare.

The Center maintains a working library of approximately 10,000 titles, including a wide range of reference works and current periodicals, as well as an extensive microfilm and microfiche collection. Through their facilities linked to the University computer, the Center's data processing staff provide statistical, technical, and programming support both for in-house researchers and the over 250 users of the National Longitudinal Surveys data tapes. They maintain the NLS tapes, data base, documentation, and associated software.

For information on specific Center activities, write: Director, Center for Human Resource Research, 5701 North High Street, Worthington, Ohio 43085.

OSU
The Ohio State University

The Center for Human Resource Research
5701 North High Street
Worthington, Ohio 43085

Center for Human Resource Research

The Center for Human Resource Research is a policy-oriented multidisciplinary research organization affiliated with The Ohio State University. Established in 1965, the Center is concerned with a wide range of contemporary problems related to developing and conserving human resources. Its more than thirty senior staff members come from disciplines including economics, education, English, health sciences, industrial relations, management science, psychology, public administration, social work, and sociology. This multidisciplinary team is supported by approximately 70 graduate research associates, full-time research assistants, computer programmers, and other personnel.

The Center has become preeminent in the fields of labor market research and manpower planning. With continuing support from the United States Department of Labor, the Center has been responsible since 1965 for the National Longitudinal Surveys of Labor Market Experience. Staff have assisted in population and human resource planning throughout the world, having conducted major studies in Bolivia, Ecuador, Kenya, Sierra Leone, Venezuela, and Zaire. At the request of the National Science Foundation, a review of the state of the art in human resource planning was conducted. Other studies have assessed the impact of labor and education policy on labor supply and evaluated employment statistics collection methods. Senior personnel are also engaged in several other areas of research—collective bargaining and labor relations, evaluation and monitoring of the operation of government employment and training programs, and the projection of health education and facility needs.

The Center for Human Resource Research has received over two million dollars annually from government agencies and private foundations to support its research in recent years. Providing support have been the U.S. Departments of Labor, State, Defense, Education, Health and Human Services; Ohio's Health and Education Departments and Bureau of Employment Services; the Ohio cities of Columbus and Springfield; the Ohio AFL-CIO; the George Gund Foundation; the Rockefeller Foundation; and the Ford Foundation. The breadth of the Center's research interests is best illustrated by a brief review of a few of its current projects.

The Center's largest project is the National Longitudinal Surveys of Labor Market Experience. This project has involved repeated interviews over a fifteen-year period with four groups of the United States population: older men, middle-aged women, and young men and women. The data are collected for 20,000 individuals by the U.S. Bureau of the Census, and the center is responsible for data analysis. Since 1979, the NLS has followed an additional cohort of 13,000 young men and women between the ages of 14 and 21. This cohort includes for the first time those serving in the armed forces at the time of the initial interview. In addition to being the definitive U.S. national data set on the labor market activities of young adults, this continuing survey includes unique batteries of questions on such socially important issues as delinquency, alcohol and drug use, fertility, and prenatal care. For this cohort, field work is handled by the National Opinion Research Center. To date the Center's staff have prepared dozens of research monographs, special reports, and books on the NLS, and they also prepare and distribute data tapes for public use.

The Quality of Work Life Project, another ongoing study, began in 1975 as an attempt to improve the productivity and the meaningfulness of work for public employees in the cities of Springfield and Columbus. Center staff also served as third party advisers and researchers exploring new techniques for attainment of management-worker cooperation and worker health in a number of central Ohio private sector industries.

(Continued on inside back cover)